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new products bulletin

bulletin de produits nouveaux

Bulletin 304, May 1981

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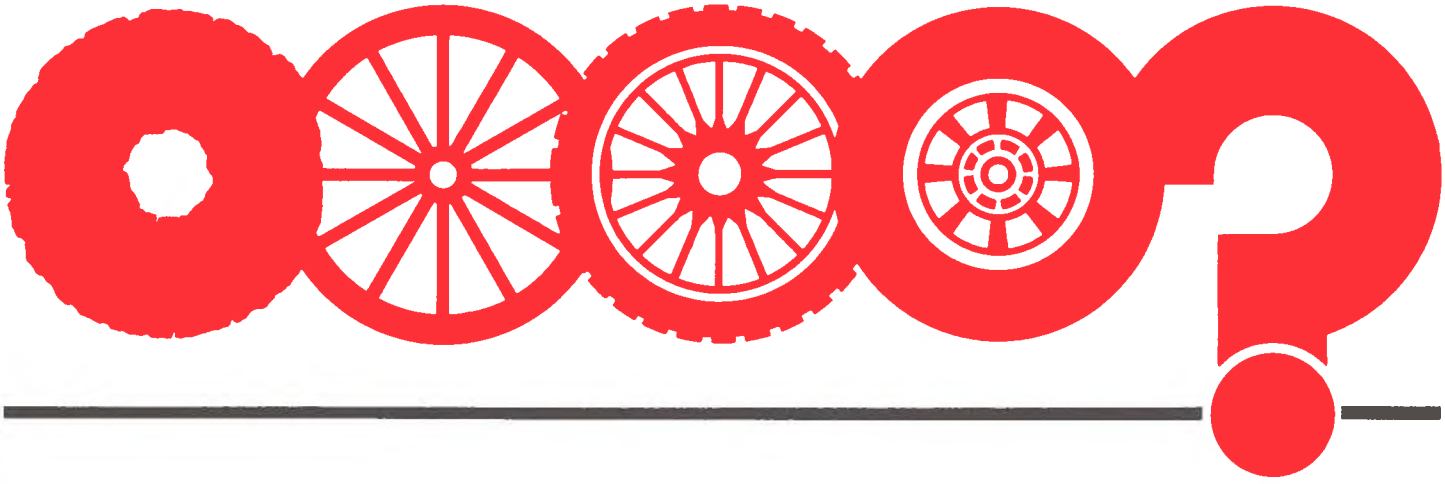


new products bulletin

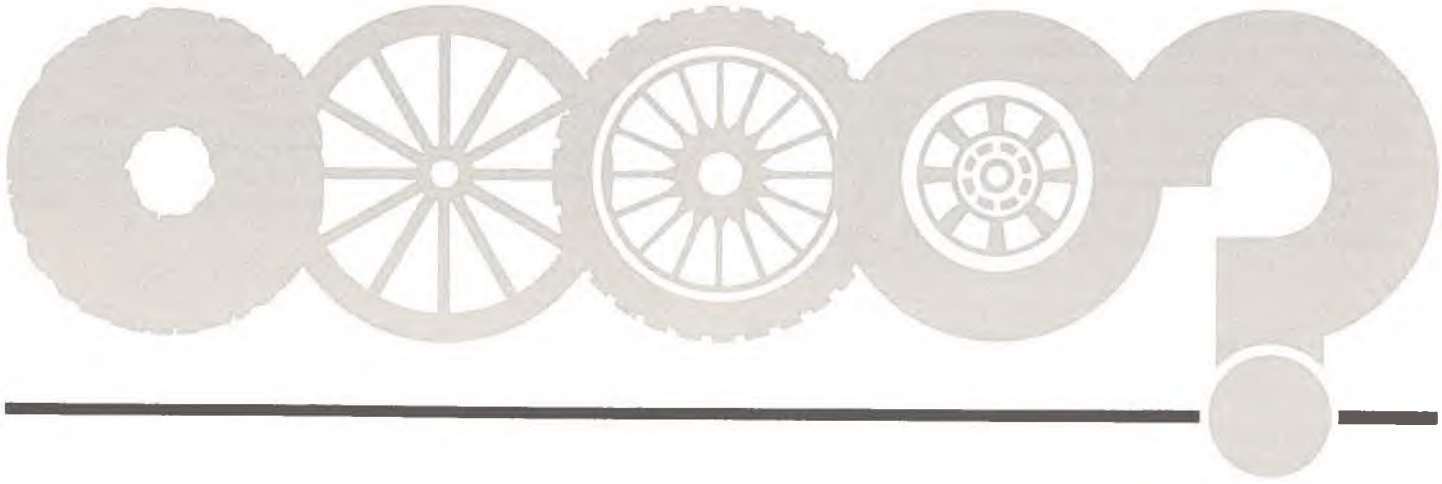
bulletin de produits nouveaux

This monthly bulletin is published to inform Canadian industry of licensing and joint venture opportunities that may be investigated for the purpose of forming manufacturing affiliations. The Department cannot assume any responsibility for claims made or for transactions which ensue from the publication of any items in this bulletin. If you are interested in any of the proposals you should contact the correspondent identified with the item and send a copy of your initial correspondence to the Canadian Government Trade Commissioner responsible for the area at the address indicated, in order that he can provide appropriate assistance or commercial information.

The Licensing Opportunities Section (34/3) of the BUSINESS CENTRE of the Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5 (Telephone: (613) 995-5771) should be advised of any agreements concluded as a result of this publicity.

Publié tous les mois, le présent bulletin a pour objet d'informer l'industrie canadienne des occasions de fabrication sous licence et d'entreprises en participation qu'il est possible d'étudier aux fins de constituer des affiliations manufacturières. Le Ministère ne peut assumer aucune responsabilité à l'égard des réclamations ou transactions découlant de la publication d'articles dans le présent bulletin. Si l'une ou l'autre des propositions vous intéresse, auriez-vous l'obligeance de communiquer avec le correspondant et transmettre copie de votre premier échange de correspondance au délégué commercial du Gouvernement du Canada qui s'occupe de la région en cause, à l'adresse indiquée, afin qu'il puisse vous fournir l'aide ou les renseignements commerciaux pertinents.

Prière d'informer la Section des possibilités de licences (34/3), du CENTRE DES ENTREPRISES, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5 (tél. (613) 995-5771), de toute entente intervenue à la suite de la présente publicité.



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Selected Licensing or Joint Venture Manufacturing Opportunities

Holographic Moving Map Display/304

The particular geometry of this holographic storage and retrieval system permits large volumes of optical data such as maps to be stored in an ordinary film cassette yet allows any desired fraction of such data to be conveniently displayed. A compact moving map display for aircraft is one obvious application. Write: Case 6179, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Canada K1A 0R3 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Detecting Luminescent Fingerprints/304

This fingerprint detection technique employs a chemical and light of a suitable frequency to induce or enhance luminescence in fingerprint specimens which can then be viewed and/or recorded through an optical filter. The apparatus required is inexpensive, portable, rugged, non-invasive and highly sensitive. Write: Case 7107, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Canada K1A 0R3 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Commutation Circuits for Thyristor Inverters/304

Several circuits which provide efficient, reliable and flexible commutation for thyristor inverters while giving protection against misfirings, shoot-throughs or short circuits. Major applications are in variable speed (pulse width modulated) induction motor drives, uninterruptible power supplies and D.C. choppers for traction drives. Write: Case 7117, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Canada K1A 0R3 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Stair Climbing Wheelchair/304

Engineering teamwork has produced a unique, manually operated, stair climbing wheelchair. Seated in this chair the handicapped person with normal arm strength, can climb stairs unassisted. Write: Case 7235, Canadian

Sélection d'occasions de fabrication sous licence ou d'entreprises en participation

Affichage mobile de cartes par holographie/304

La géométrie propre à ce système holographique de stockage et d'extraction permet d'emmagasiner de grandes quantités de données optiques, telles des cartes, sur une cassette de film ordinaire, tout en permettant de pouvoir afficher de façon pratique toute portion de ces données. Une application évidente est un affichage mobile compact de cartes dans les aéronefs. Écrire: Cas 6179, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Canada) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Détection d'empreintes digitales lumineuses/304

Cette méthode de détection des empreintes digitales utilise un produit chimique et de la lumière de fréquence appropriée pour causer ou accentuer la luminosité de spécimens d'empreintes digitales, qui peuvent ensuite être examinés ou enregistrés par l'intermédiaire d'un filtre optique. L'équipement nécessaire est peu coûteux, portatif, résistant et très sensible, et est sans danger pour l'organisme. Écrire: Cas 7107, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Canada) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Circuits de commutation pour onduleurs à thyristors/304

Divers circuits servent à la commutation efficace, fiable et souple d'onduleurs à thyristors, tout en protégeant des ratés, du claquage et des courts-circuits. Les applications principales se retrouvent dans les entraînements à moteur à induction à vitesse variable (modulation par impulsions), les sources d'alimentation sans coupure et les interrupteurs c.c. pour les entraînements à traction. Écrire: Cas 7117, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Canada) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Chaise roulante permettant de monter des escaliers/304

Un travail d'équipe a permis de concevoir une chaise roulante unique en son genre, propulsée à la main, qui permet de monter des escaliers. Assis dans cette chaise, la personne handicapée peut, si elle a une force des bras nor-

Patents and Development Limited, 275 Slater Street, Ottawa, Canada K1A 0R3 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Color Tinting Machines/304

Canadian company with the North and South American licensing rights to a patented worldwide tinting machine, seeks a joint venture partner in Canada having machinery and metal fabricating facilities. The firm would be required to manufacture these machines, including some parts that are currently imported, under a sub-licensing arrangement. The marketing will continue to be undertaken by the offering firm. These tinting machines are claimed to be recognized as the best in the world. They feature rotating stainless steel plates to the face of the raised inlet and outlet parts with exceedingly long life wear and gauges with a preset memory feature for dispensing the required color formula identically into several cans of paint. The units can be wall or bench mounted. (See illustration page 51.) Write: H.E.R.O. Manufacturing Co. Ltd., 7620 Winston Street, Burnaby, British Columbia V5A 2H4 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Traction Ramps/304

Canadian inventor offers to sell or license a company in Canada, his rights under patent number 1,023,403, for a traction device comprised of an elongated, rigid imperforate, corrugated main plate which is formed by a plurality of right angle iron pieces of equal length joined to flat bars at each end. A portion of the traction plate has corrugations at one end which decrease in depth to permit gradual traction. Another model has an extension pivotally connected at one end shorter than the main plate which can be folded for storage to nestle within the main plate corrugations. (See illustrations page 51.) Write: Mr. Paul L.J. Seguin, 12215 rue Deschamps, Pierrefonds, Quebec H8Z 1P6 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Stepoc® Building Block and Construction Method/304

Belgian licensing organization offers the rights to additional Canadian companies for the Stepoc® patented system of constructing concrete walls which is time and labour saving. The method consists of placing expanded clay-based, concrete, specially shaped, mortarless building blocks, without mortar joints, in rows one on the other

male, monter des escaliers sans aide. Écrire: Cas 7235, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Canada) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Machines à préparer la peinture/304

Une société canadienne détient les droits de licence pour l'Amérique du Nord et l'Amérique du Sud quant à une machine à préparer la peinture, brevetée dans le monde entier. Cette société propose une association en participation à un partenaire canadien possédant le matériel et les installations de fabrication du métal. La firme devrait fabriquer ces machines en vertu d'une sous-licence, y compris certaines pièces que l'on importe présentement. La firme qui propose l'entente continuera à s'occuper de la mise en marché. Les présentes machines à préparer la peinture sont censées être les meilleures au monde. Elles sont munies de clapets pivotants en acier inoxydable qui sont montés devant les pièces saillantes d'entrée et de sortie; ces clapets durent extrêmement longtemps. Des mesureurs à mémoire permettent de verser la même proportion de colorant dans plusieurs pots de peinture. Les dispositifs se fixent au mur ou sur des établis. (Voir l'illustration page 51.) Écrire à: H.E.R.O. Manufacturing Co. Ltd., 7620 Winston Street, Burnaby, Colombie-Britannique V5A 2H4 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Rampes de traction/304

En vertu du brevet 1,023,403, un inventeur canadien offre à une compagnie canadienne les droits de vente ou de licence de rampes de traction sous forme de plaque-support ondulée rigide, non perforée et plutôt longue, composée de plusieurs pièces d'acier d'égale longueur disposées à angle droit et dont les deux bouts sont fixés à des barres plates. Une extrémité de la plaque porte des ondulations dont la profondeur diminue progressivement. Sur un autre modèle, une rallonge pivotante plus courte que la plaque principale y est fixée à une extrémité; elle se rabat dessus de façon que les ondulations s'ajustent les unes aux autres et rendent la traction progressive. (Voir les illustrations page 51.) Écrire à: M. Paul L.J. Seguin, 12215 rue Deschamps, Pierrefonds (Québec) H8Z 1P6 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, Ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Blocs de béton et procédé de construction Stepoc®/304

Un organisme belge d'octroi de licences offre à de nouvelles entreprises canadiennes les droits sur le système breveté Stepoc® permettant la construction de murs de béton avec une économie de temps et d'argent. La méthode consiste à placer des blocs de béton creux spéciaux, à base d'argile expansée, sans joints de mortier, en

so that oblique channels are formed inside the built-up wall into which concrete is pumped at a relatively high rate of flow from whatever height required. It is not necessary to use skilled labour in arranging the blocks; they do not move when the concrete is pumped in; the surfaces of the walls are completely flat and homogeneous (no mortar joints) which facilitates and improves plastering and pebble dashing; the light concrete blocks and the mass of the wall provide insulation; can be used in domestic and industrial buildings, swimming pools, etc; one man can lay 500 to 1000 blocks a day; plumbing and wiring can be installed prior to pouring cement and the blocks have standard dimensions which make it easy for an architect to design freely. (See illustration page 51.) Write: Compu-Mark sprl Licensing, Rue de Livourne, 9, Bte 1, B 1050 Bruxelles, Belgique and send a copy of your original correspondence to Commercial Division, Canadian Embassy, rue de Loxum, 6, B-1000 Brussels, Belgium.

rangées superposées, de manière à créer à l'intérieur du mur des canaux obliques dans lesquels du béton est pompé à un débit relativement élevé, à quelque hauteur que ce soit. La pose des blocs n'exige pas de main-d'oeuvre spécialisée; les blocs ne bougent pas lors du pompage du béton; la surface des murs est parfaitement lisse et homogène (pas de joints de mortier) ce qui facilite et améliore le plâtrage et le crépissage; l'isolation est assurée par la légèreté des blocs et par la masse du mur; l'application englobe la construction résidentielle et industrielle, les piscines, etc.; un ouvrier peut poser de 500 à 1000 blocs par jour; la plomberie et le câblage peuvent être installés avec le pompage du béton et les blocs sont de dimensions normalisées, ce qui favorise la créativité architecturale. (Voir l'illustration page 51.) Écrire à: Compu-Mark sprl, Licensing, rue de Livourne, 9, Bte 1, B-1050 Bruxelles (Belgique) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, rue de Loxum, 6, B-1000 Bruxelles (Belgique).

Data Tablet/304

British firm offers a Canadian original equipment manufacturer a license for its multifunction digitizing tablet. The unit enables graphic or alpha-numeric information to be directly input into a computer or off-line computer storage media. It incorporates the following data input functions: handprint recognition; handprint calculator; sketch and design digitisor; and touch table. The pen contains a ball-point refill, easily replaced. It can be plugged into either side of the tablet for left or right handed users. The tablet output receives impulses from the pen. Output characters entered on the tablet are converted to ASCII code for transmission to a host computer via an RS-232-C/V24 interface at rates up to 9600 baud. In security applications, where it is important to restrict input to an authorised user, the pen can be unplugged and retained by the user. Additionally, entry can be restricted by using sign-on codes via the ten user selectable keys. Accuracy: hard copy produced instantaneously with computer input; less errors through better validation at source; more positive audit control. Cost saving: minimal data preparation staff and equipment, consequent saving in direct cost and overhead; totally variable grid layout to user requirement — no need to change forms; where application requires free format, saving on printed stationery; clerical systems remain unchanged; no costly retraining of staff; cycle of errors between data preparation and mainframe drastically reduced; and commercial standard A4 or Quarto paper is used. Advantages: easy to use by placing a sheet of paper on the tablet; the tablet is only 4 mm thick and about the size of a desk blotter; is attractive and strong. Patent protection: U.K. and U.S.A. (See illustration page 52.) Write: Image Data Products Ltd., 1-4 Portland Square, Bristo 1 BS2 8RR, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Tablette d'entrée de données/304

Une compagnie britannique offre à un fabricant canadien de matériel nouveau la licence pour sa tablette de numérisation à plusieurs fonctions. L'appareil permet d'entrer directement dans un ordinateur, ou dans des organes de mise en mémoire indépendants, de l'information graphique ou alphanumérique. L'appareil comprend les fonctions d'entrée de données suivantes: identification de caractères manuscrits, calculs à partir de caractères manuscrits, numériseur de dessins ou de plans, et tableau de commandes à effleurement. Le stylo contient une cartouche de rechange de stylo-bille, facilement remplaçable. Il peut être enfiché d'un côté ou de l'autre de la tablette, selon que l'opérateur est gaucher ou droitier. La sortie de la tablette reçoit des impulsions provenant du stylo. Les caractères de sortie entrés au moyen de la tablette sont convertis en code ASCII pour transmission à un ordinateur principal, par l'intermédiaire d'une interface RS-232-C/V24, à un débit pouvant aller jusqu'à 9600 bauds. Pour les applications à caractère sécuritaire où il est important de restreindre l'accès à un seul opérateur, le stylo peut être retiré et conservé par l'opérateur. De plus, l'accès peut être restreint par l'utilisation de codes d'identification, au moyen des dix touches programmables par l'opérateur. Précision: sortie sur papier imprimé, simultanément avec l'entrée à l'ordinateur; moins d'erreurs grâce à une meilleure validation à la source; meilleure commande de vérification. Économie: minimum de préparation du personnel et de matériel; économie résultante des coûts directs et des frais généraux; disposition de la grille entièrement variable au gré des besoins de l'opérateur, donc nul besoin de modifier les formulaires existants; si les applications exigent un format libre on réalise une économie de papier à en-tête; les systèmes de bureaux restent inchangés; aucune nouvelle formation coûteuse de personnel; le cycle de correction d'erreurs depuis la préparation des données jusqu'à l'unité centrale est énormément réduit; finalement, on utilise du papier de format commercial A4 ou in-quarto. Avantages: d'utilisation facile: il suffit de placer une feuille de papier sur la tablette; la tablette ne fait que 4 mm d'épaisseur et ses dimensions sont environ celles d'un sous-main de bureau; elle est résistante et, de surcroît, fort esthétique. L'appareil est protégé par des brevets au Royaume-Uni et aux États-Unis. (Voir l'illustration page 52.) Écrire à: Image Data Products Ltd., 1-4 Portland Square,

Bristol BS2 8RR (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commissariat du Canada, 1 Grosvenor Square, Londres W1X 0AB (Angleterre).

Metal Plastic Composite for Heat Exchanger Applications/304

Scottish firm offers a Canadian company the licensing and marketing rights to its heat transfer panel or sheet material consisting of a woven wire mesh core of high thermal conductivity metal, for example copper, embedded in a closure layer of plastics material, for example polypropylene, so that the mesh and the closure layer extend in the same longitudinal direction. The mesh core defines a nodal network and the nodes are located closely adjacent to the outer surfaces of the closure layer so that satisfactory heat transfer between opposite sides of the panel is achieved over the whole outer surface area of the panel by virtue of heat conduction by the mesh core. The material may also be made up in tube form. Compared to stainless steel mesh-plastic composite, it offers improved corrosion resistance and, when constructed with a fluorocarbon plastic, is non-scaling in desalination applications. Its heat transfer performance is similar but it is cheaper, lighter in weight and easier to fabricate. So far, development is at the laboratory stage. Mesh-plastic in a variety of plastic and mesh combinations, extruded in the form of strip 10 cm wide is available for test purposes. Write: Mr. J.C. Elliot, United Wire Group Ltd., Granton Park Avenue, Edinburgh EH5 1HT, Scotland and send a copy of your initial correspondence to Canadian Consulate, Ashley House, 195 West George Street, Glasgow G22HS, Scotland.

Composite métallo-plastique pour échangeurs de chaleur/304

Une firme écossaise offre à une société canadienne les droits de licence et de mise en marché de ses feuilles ou panneaux pour échangeurs de chaleur. Le produit se compose d'un noyau en treillis métallique tissé fait d'un métal offrant une grande conductivité thermique, comme le cuivre, qu'on noie dans une couche d'obturation en plastique, comme le polypropylène, de façon que le treillis et la couche d'obturation soient dans le même axe longitudinal. Le noyau du treillis constitue un réseau de noeuds. Comme ces derniers sont près des surfaces extérieures de la couche d'obturation et que le noyau en treillis conduit la chaleur, il se produit un échange de chaleur satisfaisant entre les côtés opposés du panneau, sur toute la surface extérieure de ce dernier. Le produit peut également se présenter sous forme de tube. Comparativement au composite plastique-treillis en acier inoxydable, ce produit résiste mieux à la corrosion et, s'il est fabriqué avec du plastique au fluorocarbure, il ne favorise pas la formation de tartre quand il est utilisé dans des appareils de dessalement. Les rendements thermiques sont semblables, mais le nouveau produit coûte moins cher, est plus léger et plus facile à fabriquer. Il en est présentement au stade de l'étude en laboratoire. Des bandes extrudées de ce produit métallo-plastique sont disponibles pour fins d'essai; elles mesurent 10 cm de largeur et sont fabriquées à partir de diverses combinaisons de plastiques et de treillis. Écrire à: Mr. J.C. Elliot, United Wire Group Ltd., Granton Park Avenue, Edinburgh EH5 1HT, Scotland et faire parvenir une copie de votre correspondance initiale au Canadian Consulate, Ashley House, 195 West George Street, Glasgow G22HS, Écosse.

Universal Bracket/304

Swedish company offers the North American manufacturing and marketing rights under its U.S. and Canadian patents for the "Burwall" coupling for assembling temporary covering scaffolds. It is used to connect together wooden frame members such as 5 cm x 7.5 cm — 5 cm x 10 cm studs in the construction of frames for supporting tarpaulins, plastic foil, awnings, corrugated plastic and like covers. The advantage afforded by this connecting element is that it enables the wooden frame structures to be readily assembled and dismantled at a relatively low investment cost. For example, the corner bracket is a unique, one piece casting light metal coupling, consisting of open ended sleeves and lock screws which connects wooden studs at all the joints of the frame structure. Advantages: both on ridge-pole and eaves as the angle is the same; both on intermediate and endwall frames as the middle hollow sleeve of the coupling is pointing out in only one direction; structures can be made as long as required as the frame members can be joined in the middle hollow sleeve of the coupling with a lock screw each; eliminates rust problems and any assembly problems due to a rough terrain, as the open ended sleeves have a form permitting the insertion of even twisted and bent wooden studs; dismantling a nailed

Raccord universel/304

Une compagnie suédoise offre les droits de fabrication et de commercialisation, sous ses brevets américains et canadien, des raccords "Burwall" pour l'assemblage d'abris temporaires. Ils sont utilisés pour assembler des pièces de bois comme les poteaux de 5 cm x 7.5 cm ou de 5 cm x 10 cm pour la construction de charpentes pour soutenir une bâche, une feuille de plastique, des panneaux de plastique ondulé ou d'autres couvertures semblables. L'avantage qu'offre ce système d'assemblage est qu'il permet de monter et de démonter rapidement des charpentes de bois à un coût relativement faible. Le raccord de coin, par exemple, est un élément unique, en métal léger, moulé tout d'une pièce, constitué de manchons ouverts et de vis de blocage qui relient les poteaux à tous les points d'assemblage de la structure: au faîtage comme aux rives inférieures, puisque l'angle est le même, aux pièces intermédiaires comme à celles des parois d'extrémité, puisque le manchon creux du milieu pointe vers l'extérieur dans une seule direction. Les structures peuvent être de la longueur désirée car les pièces de bois peuvent être introduites dans le manchon creux du milieu et assujetties individuellement par une vis de blocage. Ces raccords permettent de plus d'éliminer les problèmes de rouille et tous les

structure will eventually ruin the timber — this is avoided by using the coupling with its lock screws; comparable dismountable connecting systems are more expensive; and, definitely saves time in assembly in that all corners are correct — dismounting is easily done by loosening the screws. (See illustrations page 52.) Write: Burwall & Co., Hjartervagen 7, S 142 00 Trangsund, Sweden and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

problèmes d'assemblage causés par un terrain difficile car les manchons tubulaires ont une forme qui permet d'utiliser même les poteaux tordus ou fléchis. Le démontage d'une charpente assemblée avec des clous peut endommager gravement le bois, inconvénient qui est évité avec les raccords et leurs vis de blocage. Les systèmes comparables d'assemblage démontable sont coûteux. L'assemblage est beaucoup plus rapide car tous les angles sont bien jointifs. Le démontage est facile: il n'y a qu'à desserrer les vis. (Voir les illustrations page 52.) Écrire à: Burwall & Co., Hjartervagen 7, S 142 00 Trangsund (Suède) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, C.P. 16129, S-103 23 Stockholm 16 (Suède).

Collapsible Cart/304

Dutch company offers a Canadian company the manufacturing, marketing and export rights for its "BOARDCART", a commercially proven collapsible carrier on which patents are pending. Currently made, complete with lashing strings, for transporting surfboards, the cart has application also as a baby carriage; shopping cart for car drivers, cyclists; transport cart for beach visitors, etc. It can be adjusted to various heights, collapses without removing the wheels, is lightweight, strong, compact, has normal wheel diameters with light massive tires having a flexible and wide tread so that there is no dragging in loose sand. (See illustration page 52.) Write: Compact Cars, Postbus 55, 3870 CB Hoevelaken, Holland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Sophialaan 7, The Hague, Netherlands.

Chariot pliant/304

Une entreprise hollandaise offre à une firme canadienne les droits de fabrication de mise en marché et d'exportation pour son chariot "BOARDCART" un chariot commercial pliant éprouvé pour lequel les brevets sont en instance. Tel qu'il est fabriqué actuellement, pour le transport des aquaplanes, avec un brêlage, ce chariot peut également servir comme voiture d'enfant, chariot de magasinage pour les automobilistes et les cyclistes, chariot tout usage pour les vacanciers au bord de la plage etc. Il peut être réglé à différentes hauteurs et se plie sans qu'il soit nécessaire de retirer les roues. Il est léger solide, compact et a des roues d'un diamètre standard avec de gros pneus légers composés d'une semelle souple et large, qui facilite le déplacement sur le sable. (Voir l'illustration page 52.) Écrire à: Compact Cars, Postbus 55, 3870 CB Hoevelaken (Pays-Bas) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Sophialaan 7, La Haye (Pays-Bas).

Building Chemicals/304

Austrian manufacturer with a range of construction coatings and sealants (including bituminous, resin and plastic products) and concrete additives offers to license production in Canada to firms that are established in these or related fields. Interested companies should have, or be capable of adding, the requisite manufacturing facilities, and must have an established marketing and distribution capability in the construction and building trades fields. Write: Chemische Werke, Franz v. Furtenbach GmbH, Neudorfler Straße 113-119, 2700 Wiener Neustadt, Austria and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Luegerring 10, 1010 Vienna, Austria.

Produits chimiques pour l'industrie de la construction/304

Un fabricant autrichien d'enduits et de bouche-pores (y compris des produits bitumineux, des résines et des plastiques) ainsi que d'adjuvants du béton, offre à des entreprises canadiennes spécialisées dans ces domaines ou des domaines analogues des possibilités de fabrication sous licence. Les intéressés doivent posséder les installations nécessaires ou être en mesure de les ajouter à leurs propres aménagements, et doivent en outre bénéficier d'un réseau de commercialisation et de distribution de matériaux de construction. Écrire à: Chemische Werke, Franz v. Furtenbach GmbH, Neudoerfler Straße 113-119, 2700 Wiener Newstadt (Autriche) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Luegerring 10,1010 Vienne (Autriche).

Construction Compounds/304

Liechtenstein licensing intermediary offers a Canadian company the manufacturing and marketing rights for formulations covering a wide range of "Murexin" building chemicals and concrete additives, mould oils, wood preservatives, protective coatings, joint sealants, synthetic mortars, plastic paints, etc., which are claimed to give

Produits pour la construction/304

Un intermédiaire responsable de l'octroi de licences au Liechtenstein offre à une compagnie canadienne les droits de fabrication et de commercialisation sur les formulations d'une vaste gamme de produits "Murexin" qui comprend des produits chimiques pour la construction et des adjuvants à béton, des huiles à décoffrage, des produits de

cheaper formulations while retaining the same property level as similar products and use less compound to give same results while ensuring higher quality. The licensee will provide: training of Canadian technicians in Austria; send a "Murexin" technician to Canada; know-how; the formulations for various compounds; and detailed application experience, namely which problem can be solved by what product, and how. Licenses have been granted in 12 countries, including the U.S.A. Write: Technolizenz Establishment, Austrasse 4, FL 9490 Vaduz, Liechtenstein and send a copy of your initial correspondence to Commercial Division Canadian Embassy, Kirchenfeldstrasse 88, 3005 Berne, Switzerland.

conservation du bois, des enduits de protection, des produits d'étanchéité des joints, des mortiers synthétiques, des peintures plastiques, etc., qui devraient permettre des formulations plus économiques tout en gardant les mêmes propriétés que les produits comparables, mais pour une quantité réduite et une qualité supérieure. Le titulaire de la licence fournira: la formation de techniciens canadiens en Autriche; un technicien de "Murexin" au Canada; le savoir-faire; les formulations pour les différents produits et des explications d'application détaillées, notamment sur le choix du produit et de la méthode à employer pour tel ou tel problème. Douze pays ont déjà octroyé des licences pour ces produits, dont les États-Unis. Écrire à: Technolizenz Establishment, Austrasse 4, FL 9490 Vaduz, Liechtenstein et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Kirchenfeldstrasse 88, 3005 Berne (Suisse).

Light Weight Fly-Ash Aggregate/304

The Institute of Building Materials in Opole, Poland offers a license for methods of manufacturing Gralit (a light weight fly-ash aggregate), machinery and equipment used in that industry and know-how. Gralit is used for production of structural, insulating and other concretes, as a filling material for structural gypsum members and for insulating fillings in the building industry. It has round grains, almost completely closed surface pores and only a slight variation in the bulk density of the aggregate. It is produced from such raw materials as dry fly ash from power plants, clay or other mineral raw materials, even waste, of the silt or phyllite type, etc. The technical properties of the aggregate are as follows: the bulk density 300-900 kg per cu.cm., the apparent specific gravity 0.6-1.8 g per cu.cm., the compressive strength 10-120 kg per sq. cm., the water absorption 7-15 per cent, and the grain size 2-8 mm, or 8-16 mm. A typical plant employing 50 workers is claimed to produce 200,000 cubic meters of aggregates per year, to consume 100,000-130,000 Mg of raw materials and use 18 kWh per cubic meter. The basic plant consists of oil and/or gas fired rotary kiln, a cooler, a sludger, a disc granulator, conveyors, vibration screens, storage bins, sludge pumps, batching scales, dust collectors for cool air and hot gases, and loading equipment. Write: Polimex-Cekop Foreign Trade Enterprise, ul. Czackiego 7/9, 00-950 Warszawa, Poland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Matejki 1/5, Srodmiescle, Warsaw, Poland.

Granulat léger de cendres volantes/304

L'institut des matériaux de construction d'Opole, en Pologne, offre les droits de licence pour les méthodes de fabrication du Gralit (un granulat léger de cendres volantes), pour la machinerie et l'équipement utilisés dans cette industrie ainsi que pour le savoir-faire. Le Gralit est utilisé dans la production du béton armé, du béton isolant et d'autres bétons, et comme matériau de remplissage dans les éléments structuraux en plâtre et comme matériau de remplissage isolant dans l'industrie de la construction. Ses grains sont de forme arrondie, les pores de leur surface sont presque complètement fermés et il n'y a qu'une légère variation dans la masse volumique apparente du granulat. Il est fabriqué à partir de matières premières comme les cendres volantes sèches des centrales thermiques, l'argile et d'autres minéraux et même les déchets silteux, phyllitiques, etc. Les propriétés physiques de ce granulat sont les suivantes: masse volumique apparente de 300-900 kg par mètre cube, densité relative apparente de 0.6 à 1.8 g par centimètre cube, résistance à la compression de 10-120 kg par centimètre carré, absorption d'eau de 7-15 pour cent et granulométrie de 2-8 mm ou de 8-16 mm. Une usine type employant 50 ouvriers devrait pouvoir produire 200 000 mètres cubes de granulat par année, en utilisant entre 100 000 et 130 000 Mg de matières premières et 18 kWh par mètre cube. L'installation de base consiste en un four rotatif chauffé au mazout ou au gaz ou aux deux, un refroidisseur, une tarière à clapet, un granulateur à disques, des convoyeurs, des cribles vibrants, des trémies de stockage, des pompes à boues, des bascules de dosage, des dépoussiéreurs pour l'air frais et les gaz chauds et un équipement de chargement. Écrire à: Polimex-Cekop Foreign Trade Enterprise, ul. Czackiego 7/9, 00-950 Warszawa (Pologne) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Matejki 1/5, Srodmiescle, Varsovie (Pologne).

Loop Fasteners/304

French manufacturer of ribbons and tapes, proposes a partnership with a Canadian manufacturer of ribbons and tapes for the production of hook and loop fasteners called CRIC-CRAC. Eventually, other products such as TIC TAC, RUBASTRAD, PLISSTOU, etc., fasteners could be added to the production line. The French company claims that its products are less expensive due to advanced technology

Rubans et galons de fixation/304

Un fabricant français de rubans et galons de fixation propose de s'associer avec une entreprise canadienne pour la fabrication d'un ruban de fixation du type à boucles et crochets (ruban champignon) appelé CRIC-CRAC. Par la suite, d'autres articles de fixation (TIC TAC, RUBASTRAD, PLISSTOU etc. . .) pourraient être ajoutés. La société française affirme que ses produits sont moins chers car elle dispose

which enables the firm to produce hook tape called CRIC in one operation, while competitive products require three operations. The French firm is willing to discuss the possibility of a joint venture with a potential Canadian partner. The investment required from the Canadian firm is estimated at $400,000-$500,000 and the French company will match this amount by supplying raw materials plus technical and commercial assistance. Write: V. Louison et Cie, Route Nationale 82, 42480 La Fouillouse, France and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, 35 Avenue Montaigne, 75008 Paris, France.

Medication Dispenser/304

American engineer, in collaboration with a physician, has developed a shoe box size electronic pill dispenser for the elderly or invalids who are regularly required to take complicated doses of medicine. A patent is pending in the U.S.A. on which the North American manufacturing and marketing rights are currently available. The device is equipped with a scheduled alarm and verification/monitoring aid. The dispenser is claimed to be the core of a new, automatic, safe system of administering medication on a long term basis for individuals and to substantially decrease cost and error in dispensing medication for hospital and nursing home care. The inventors are offering technical know-how, detailed drawings, a working prototype, consultation and patent protection on a selected worldwide basis. (See illustration page 52.) Write: Mr. Charles D. Battersby, Salubrion, Elmdale Road, Uxbridge, Massachusetts 01569 and send a copy of your initial correspondence to Canadian Consulate General, 500 Boylston Street, Boston, Massachusetts 02116, U.S.A.

Port-O-Wall® /304

American inventor offers exclusive manufacturing and marketing rights in Canada for a patent pending method of making multi-purpose precast concrete structures and methods of employing same. Trade mark and registered design protection has also been obtained. The U.S. issued patent covers 46 approved claims, i.e., productivity factors with respect to 1) mass producing standard sizes; 2) transporting; 3) erecting various types (curtain, retaining and/or load bearing walls). It is claimed that these productivity factors provide means to considerably lower the cost of walls now being used, i.e., verified cost estimates indicate that a Port-O-Wall system versus a concrete block or a tilt-up wall 15 cm thick, 1.5 m wide and 3.3 m high can be erected at approximately 22 percent less cost in half the time without the use of forms or prepared footings. Greater lengths of wall comprised of standard 1.5 m, Port-O-Wall sections is an additional advantage over conventional methods. Also possible passive solar energy savings can be attributed to the Port-O-Wall system in building single story structures because of the monolithic features of foundation and footing-to-wall-to-floor. Write: Mr. Arthur F. Hilsey, 6409 SE Evergreen Highway, Vancouver, Washington 98661 and send a copy of your initial correspondence to Canadian Consulate General, 412 Plaza 600, Sixth and Stewart, Seattle, Washington 98101, U.S.A.

d'une technologie plus avancée qui lui permet de fabriquer le ruban champignon CRIC en une seule opération alors que ses concurrents doivent le faire en trois. La société française aimerait discuter des possibilités d'association avec une entreprise canadienne. Le capital demandé à cette dernière s'élèverait à $400,000 ou $500,000 et la société française apporterait une part égale en matériel et en aide technique et commerciale. Écrire à: V. Louison et Cie, Route nationale 82, 42480 La Fouillouse, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Distributeur de médicaments/304

En collaboration avec un médecin, un ingénieur américain a conçu un distributeur électronique de pilules de la taille d'une boîte de souliers, et destinée aux personnes âgées ou aux invalides qui doivent régulièrement prendre des doses compliquées de médicaments. Un brevet est en attente aux États-Unis, pour lequel les droits de fabrication et de commercialisation sont déjà disponibles. Le dispositif est équipé d'un avertisseur programmé et d'un contrôle. Le distributeur est présenté comme le coeur d'un nouveau système sûr et automatique pour administrer des médicaments à long terme à des individus et pour réduire considérablement le coût et les erreurs liés à l'administration des médicaments dans les hôpitaux et les foyers de vieillards. Les inventeurs offrent l'information technique, les plans détaillés, un prototype opérationnel, des services de consultation et une protection de brevet dans de nombreux pays choisis à travers le monde. (Voir l'illustration page 52.) Écrire à: M. Charles D. Battersby, Salubrion, Elmdale Road, Uxbridge, Massachusetts 01569 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 500 Boylston Street, Boston, Massachusetts 02116 (É.-U.).

Port-O-Wall® /304

Un inventeur américain offre les droits exclusifs de fabrication et de commercialisation au Canada pour une méthode de fabrication de structures de béton préfabriquées à usages multiples dont le brevet est en instance, ainsi que pour les techniques d'utilisation de cette méthode. Une protection de la marque de fabrique et du modèle déposé à également été obtenue. Le brevet émis aux États-Unis porte sur 46 revendications approuvées, c'est-à-dire les facteurs de productivité concernant: 1) les dimensions normalisées de fabrication en série; 2) le transport; 3) l'érection de divers types de structure (murs-rideaux, murs de soutènement ou murs porteurs ou les deux). Ces facteurs de productivité devraient permettre de réduire considérablement le coût des murs par rapport à ce qui se fait présentement. Des devis financiers vérifiés indiquent que l'utilisation du système Port-O-Wall, qui n'utilise ni coffrages, ni fondations préparées, représente une réduction d'environ 22 pour cent du coût de construction et ne demande que la moitié du temps nécessaire par rapport à un pan de mur en blocs de béton ou mis en place à la grue et dont les dimensions sont de 15 cm d'épaisseur, 1.5 m de largeur et 3.3 m de hauteur. L'utilisation des sections Port-O-Wall standard de 1.5 m permet de construire des murs plus longs, ce qui constitue un autre avantage par rapport aux méthodes traditionnelles. De plus, le système Port-O-

Wall permet de réaliser des économies d'énergie dans les constructions à un seul niveau à système solaire passif grâce à sa structure tout d'un bloc: fondation-mur-plancher. Écrire à: M. Arthur F. Hilsey, 6409 SE Evergreen Highway, Vancouver, Washington 98661 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 412 Plaza 600, Sixth and Stewart, Seattle, Washington 98101 (É.-U.).

Drying Seed Maize/304

Austrian firm seeks a Canadian licensee for a drying method for seed corn which uses no outside energy, but uses exclusively, energy inherent in the corn and in the process itself. The most important application is drying of seed corn. The main advantage of the method lies in its savings of oil, gas and other fuels normally used to dry seed corn. The special design of the dryer and the process cycle reduce the amount of energy needed for drying and presumably also shortens the drying time. Measurements to determine this are underway. Assistance offered: Drawings, technical know-how, training of personnel in pilot plant. Write: Dr. Peter J. Weiss, Dipl.-Ing. Techn., Strauchergasse 12a, 8020 Graz, Austria and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Luegerring 10, 1010 Vienna, Austria.

Séchage du maïs en grains/304

Une société autrichienne cherche à accorder une licence canadienne pour une méthode de séchage du maïs en grains qui n'exige pas d'énergie extérieure, mais utilise uniquement l'énergie contenue dans le maïs lui-même. Pour augmenter l'économie du procédé on utilise également un échangeur pour récupérer la chaleur qui serait autrement perdue. L'application la plus importante est le séchage du maïs en grains. Le principal avantage du procédé réside dans le fait qu'il n'utilise pas de combustibles fossiles. Par ailleurs, la conception du séchoir et du cycle de séchage réduit la quantité d'énergie nécessaire et probablement aussi le temps de séchage. Des mesures sont actuellement en cours pour établir cette hypothèse. Assistance proposée: Plans, aide technique, formation du personnel dans une usine pilote. Écrire à: Dr Peter J. Weiss, Strauchergasse 12a, 8020 Graz (Autriche) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Luegerring 10, 1010 Vienne (Autriche).

Sewing Aids/304

Australian inventors offer manufacturing licensing rights, joint venture agreements or sale of the patent outright for sewing devices for precise sewing in of zippers, sleeves, collars, pockets, cuffs, darts, seams, etc., up to complete garments. The device fits standard, industrial and domestic sewing machines and can be used in the clothing manufacturing industry, tailoring and dressmaking trades, and also in the home sewing field. It is claimed to save 65 percent of time and labour costs. Patents are granted in seventeen countries including Canada — 1,034,438. The device which is made of metal and plastic, has been granted three international awards and consists of two special feet, a needle plate, feed dog, devices for sewing in zippers, (domestic and industrial use) circle shape stitching device, full frame and strip frame, device for sewing in sleeves. Write: Kate Models Pty, Ltd., 50 Matthews Street, Punchbowl 2196, Sydney, N.S.W., Australia and send a copy of your initial correspondence to Canadian Consulate General, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, N.S.W. 2000, Australia.

Aides à la couture/304

Des inventeurs australiens offrent les droits de fabrication sous licence, des accords de coparticipation à l'entreprise ou sont disposés à vendre le brevet protégeant le dispositif de couture permettant le montage précis des fermetures à glissière, des manches, des cols, des poches et des poignets et l'exécution précise des pinces et des coutures jusqu'à la réalisation des vêtements au complet. Le dispositif s'adapte aux machines à coudre ordinaires, industrielles et domestiques et peut être utilisé dans l'industrie de confection du vêtement à l'usine ou par des tailleurs et couturières et dans les travaux de couture exécutés à la maison. Il semble que cette invention permette de réaliser des économies de temps et de main-d'oeuvre de 65%. Des brevets sont délivrés dans dix-sept pays, y compris le Canada (nº 1,034,438). Le dispositif constitué de métal et de plastique a reçu trois prix internationaux et consiste en deux pieds spéciaux, une plaque à aiguille, une griffe d'entraînement, des dispositifs pour le montage des fermetures à glissière (usage domestique et industriel), un dispositif de piquage circulaire, un bâti intégral et un bâti à bandes et un dispositif pour le montage des manches. Écrire à: Kate Models Pty. Ltd., 50 Matthews Street, Punchbowl 2196, Sydney, N.S.W. (Australie) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, N.S.W. 2000 (Australie).

Metal Ladder/304

German inventor offers a Canadian company the North American and British manufacturing and marketing rights

Échelle métallique/304

Un inventeur allemand offre à une entreprise canadienne les droits de mise en marché et de fabrication pour l'Améri-

to a ladder made from relatively thin metal sheet. Production plant engineering and design is also available to the Canadian licensee. The ladder is formed by punching adjacent openings from the sheet to leave edge strips which are subsequently folded to form stiles and cross pieces which are twisted to form tread bodies. Embossed corrugations are incorporated into the twisted metal portions between the tread bodies and the stiles, and stiffening cheeks along the edges of the tread bodies are folded below the said bodies, thereby imparting rigidity to the ladder structure. Additionally or alternatively, holes and/or further corrugations may be included, and the stiles may, if desired, be oval cross-sections each with connecting cheeks along their facing edges. (See illustration page 53.) Write: Dipl.-Ing. Leo Fleuchaus, Melchiorstrasse 42, 8000 Munchen 71, West Germany and send a copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, 4 Duesseldorf, West Germany.

que du Nord et les Iles Britanniques d'une échelle métallique relativement légère. La firme canadienne pourra bénéficier également d'une aide pour la conception et la réalisation d'une usine de production. L'échelle est fabriquée à partir d'une tôle dans laquelle on effectue des découpes à la presse hydraulique de façon à laisser des bandes latérales et des bandes transversales qui seront ensuite repliées pour former les montants et les échelons. Les échelons sont ensuite soumis à un mouvement de pivotement pour fournir une surface horizontale pour poser les pieds. Des nervures en relief renforcent les échelons à leur points de raccord avec les montants de façon à augmenter la rigidité de l'échelle. On peut ajouter ou remplacer des trous ou des ondulations au besoin et les montants peuvent être éventuellement de section ovales avec des rebords longitudinaux sur le bord avant. (Voir l'illustration page 53.) Écrire à: Dipl.-Ing. Leo Fleuchaus, Melchiorstrasse 42, 8000 Munchen 71 (Allemagne de l'Ouest) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, Immermannstrasse 3, 4 Dusseldorf (Allemagne de l'Ouest).

Universal Drive/304

American inventor offers a Canadian company licensing rights under his U.S. Patent Number 3,899,189 for a universal manual drive for a wheeled vehicle. The inner hand rims are connected to the two drive wheels on a vehicle of the wheel-chair type either directly or through belts, chains or the like. Outer hand rims are mounted adjacent the inner hand rims and are fixed to and connected together by an axle. Couplings then selectively couple the inner hand rims directly to the axle or to the outer hand rims for converting vehicle from two-arm drive to either a one-arm left hand drive or a one-arm right hand drive. Write: Convaid Marketing & Sales Co., Inc., P.O. Box 2731, Palos Verdes, California 90274 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

Entraînement universel/304

En vertu du brevet américain 3 899 189, un inventeur américain offre à une société canadienne les droits exclusifs de mise en marché d'un entraînement manuel universel destiné à un véhicule sur roues. Sur un véhicule du genre chaise roulante, les cerceaux intérieurs sont reliés aux roues motrices soit directement, soit par l'intermédiaire de courroies, de chaînes ou d'un ensemble similaire. Les cerceaux extérieurs sont adjacents aux cerceaux intérieurs; un essieu les relie l'un à l'autre. Des accouplements permettent de faire avancer la chaise avec l'un ou l'autre des cerceaux extérieurs, ou avec les deux à la fois. Écrire à: Convaid Marketing & Sales Co., Inc., P.O. Box 2731, Palos Verdes (Californie) 90274 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 510 West Sixth Street, Los Angeles, Californie 90014 (É.-U.).

Direct Reading Radius Gauge/304

American inventor offers a Canadian company the manufacturing, marketing and export rights under his U.S. Patent Number 4,132,001. This gauge is capable of measuring directly the radius of an object in a desired system of measurement. The gauge is unique in that a direct reading can be obtained when only a segment of the cylindrical shape is available. It is portable and can be taken to the workplace. The instrument includes a Y-shaped frame having a base and two divergent legs and a micrometer head having its spindle arranged to penetrate an opening provided through the frame base portion. Values are imputed to the cooperative scale elements on the micrometer. The micrometer is calibrated to indicate zero when the spindle end face includes the line of intersection between two facing convergent planar surfaces on the legs. When the leg planar surfaces and the spindle end face contact an object's surface of revolution, the micrometer scale will indicate directly the radius of such surface. Write: Mr. Konrad Petrik, 6 Autumn Lane, Depew, New York 14043 and send a copy of your initial correspondence to Canadian Consulate, One Marine Midland Center, Suite 3550, Buffalo, New York 14203, U.S.A.

Jauge de rayon à lecture directe/304

Un inventeur américain offre à une compagnie canadienne les droits de fabrication, de commercialisation et d'exportation de son brevet américain n° 4 132 001. La jauge en question peut mesurer directement le rayon d'un objet dans le système d'unités choisi. L'intérêt de cet instrument est qu'il permet une lecture directe même quand on n'a accès qu'à une partie de l'objet cylindrique à mesurer. Il est portatif et peut être amené sur la pièce à mesurer. L'instrument est constitué d'un corps en Y, comportant un manchon et deux branches divergentes, et d'une tête micrométrique dont la tige traverse un alésage axial pratiqué dans le manchon. Les valeurs appropriées sont attribuées aux graduations de la tête micrométrique. Le micromètre est étalonné pour afficher zéro quand le bout de la tige coïncide avec l'intersection des faces d'appui des branches. Lorsque ces faces d'appui et le bout de la tige sont en contact avec la surface de révolution de l'objet, le micromètre affiche directement le rayon de cette surface. Écrire à: M. Konrad Petrik, 6 Autumn Lane, Depew, New York 14043 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, One Marine Midland Centre, Suite 3550, Buffalo, New York 14203 (É.-U.).

Loop Reactor for Chemical Processes/304

German inventor offers a Canadian company possessing sales and technical experience in chemical process technologies, the marketing and production rights under license of its patented loop reactor for mixing chemical substances and/or for bringing about a chemical reaction. This invention relates to loop-type reactors wherein the reactants are in circulation about a guide tube arranged concentrically within the reactor. Loop reactors of this type are not only used for mixing and performing chemical reactions but also for purifying exhaust gases and industrial sewage. The licensor will provide technical information, drawings and know-how. Write: Ing. Herwig Burgert, Fischbach 3, D-6305 Buseck, West Germany and send a copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, 4 Duesseldorf, West Germany.

Réacteur à boucle pour l'industrie chimique/304

Un inventeur allemand offre à une société canadienne ayant l'expérience de la vente et des techniques dans le domaine des traitements chimiques, les droits de commercialisation et de production sous licence de son réacteur à boucle breveté, utilisable pour le mélange de substances chimiques et/ou pour effectuer des réactions chimiques. L'invention est un réacteur à boucle où les produits de la réaction sont en circulation dans un tube guide placé concentriquement dans le réacteur. Les réacteurs de ce type peuvent servir non seulement au mélange de produits chimiques ou à des réactions chimiques, mais aussi à la purification de gaz d'échappement et d'eaux usées. Le détenteur du brevet fournira les renseignements techniques, les plans et le know-how. Écrire à: Ing. Herwig Burgert, Fischbach 3, D-6305 Buseck (Allemagne de l'Ouest) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, Immermannstrasse 3, 4 Düsseldorf (République fédérale d'Allemagne).

Pollution Detection in Liquids/304

Belgian inventor offers the manufacturing and marketing rights for a method and apparatus for automatically detecting and measuring the concentration of bacteria in liquids. This is primarily concerned with coliform bacteria in water supplies but is equally applicable to the measurement of concentration of any other microorganism in fluid streams. The method consists of dispensing the diluted fluid drop-by-drop onto an absorbent surface which is subsequently treated so that the presence of microorganisms can be detected. The fluid stream to be sampled is continuously diluted so that the probability of a drop containing more than one microorganism is small. The absorbent surface is moved in such a manner that each drop remains separate and distinct. Nutrient solution is dispensed onto each drop after which the absorbent surface is passed continuously through an incubator. The surface after treatment, consisting of separate patches of bacterial colonies on a tape, is subsequently examined automatically with a photocell or other suitable counter. The system incorporates a micro processor to program, control and monitor the essential operational parameters of the apparatus and to provide the required display data concerning the pollution which may be present in the fluid stream. The invention, which has been patended in several countries may require some additional development and testing prior to manufacture of the prototype. Write: Mr. William E. Cunningham, Box 18, 199 Avenue Winston Churchill, 1180 Brussels, Belgium and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, rue de Loxum, 6, B-1000 Brussels, Belgium.

Détection de la pollution dans le liquides/304

Un inventeur belge offre les droits de fabrication et de commercialisation d'un système permettant de détecter et de mesurer automatiquement la concentration des bactéries présentes dans un liquide. Le système est destiné avant tout aux bactéries coliformes de l'eau, mais il peut également mesurer la concentration de tout autre micro-organisme présent dans un liquide. Il s'agit de laisser tomber goutte à goutte un liquide dilué sur un ruban absorbant qui est ensuite traité en vue de la détection des micro-organismes qui s'y trouvent. Le liquide étudié est dilué en continu, de sorte que les chances sont très faibles qu'une goutte contienne plus d'un micro-organisme. Le ruban se déplace, de sorte que les gouttes demeurent séparées; on ajoute une solution de matières nutritives à chacune d'entre elles puis on les soumet à l'incubation en continu. À la fin de la préparation, le ruban porte une série de colonies bactériennes distinctes. On le soumet alors au comptage automatique effectué au moyen d'une cellule photoélectrique ou de tout autre appareil pouvant accomplir cette tâche. Le système incorpore un microprocesseur qui permet de programmer, de commander et de contrôler les principaux paramètres de l'appareil et produit les données relatives à la pollution du liquide. Cette invention a été brevetée dans plusieurs pays; elle peut nécessiter des développements et d'autres essais avant que l'on fabrique le prototype. Écrire à: M. William E. Cunningham, B.P. 18, 199, avenue Winston Churchill, 1180 Bruxelles (Belgique) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, rue de Loxum, 6, B-1000 Bruxelles (Belgique).

Automatic Electric Heat Treatment and Hardening Equipment for Tube Blanks/304

Russian State trading agency offers a licensing arrangement for the production in Canada of its newly developed automatic electric heat treatment and hardening equipment for tube blanks. It is claimed that any grain size can be obtained within the range of 5 to 30 μ and that grain size stability is guaranteed. When the stage is set to form bellows-corrugated surfaces, the uniform oxide film performs the function of a lubricant and, since the film does

Matériel automatique de traitement et de trempe électrothermiques pour blancs de tubes/304

Une agence commerciale russe offre des possibilités de licence pour la production au Canada de son nouveau matéreil automatique de traitement et de trempe électrothermiques pour blancs de tubes. Le matériel permettrait d'obtenir toute dimension de grain comprise entre 5 et 30 μm, la stabilité des dimensions étant garantie. Quand vient le temps de former les surfaces ondulées des soufflets, le film uniforme d'oxyde joue le rôle de lubrifiant;

not have to be removed, there is no need for pickling before forming. The efficiency is claimed to be 0.85 to 0.9. Write: V/O Licensintorg, 31 Ul. Kahovka, 113461 Moscow, USSR and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, 23 Starokonyushenny Pereulok, Moscow, USSR.

comme il n'est pas nécessaire d'éliminer le film d'oxyde, aucun traitement préalable à l'acide n'est requis. On affirme que le rendement du matériel est de 0,85 à 0,90. Écrire à: V/O Licensintorg, 31, rue Kakhovka, 113461 Moscou (URSS) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 23 Starokonyushenny Pereulok, Moscou (URSS).

Planetime Clock/304

American inventor offers the licensing rights in Canada for a replica of the solar system in miniature composed primarily of gears. It has a stellar background with the constellations and the nine planet spheres suspended on clock hands which are synchronized to the true solar system's planets and stars. It defines the earth and moon spheres that have the same basic motions and time periods as the true earth and moon. It is claimed that the existing technology used to explain the solar system is with dials, gauges, gears and solar maps. To observe the clock is like looking at the solar system itself. Its primary use is as an educational aid in high schools and colleges. Secondary markets are planetariums, science establishments and individuals. Economic data, patent protection in 16 countries, including Canada, and know-how are available. Reference Number A6656. Write: Dr. Dvorkovitz & Associates, P.O. Box 1748, Ormond Beach, Florida 32074 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

Horloge Planetime/304

Un inventeur américain offre les droits de fabrication au Canada de sa maquette reproduisant fidèlement le système solaire et constituée surtout d'engrenages. Possède une toile de fond stellaire comprenant les constellations et neuf sphères (correspondant aux neuf planètes) suspendus à des aiguilles d'horloge dont le mouvement est synchronisé avec celui des étoiles et des planètes du vrai système solaire. Représente la terre et la lune avec des sphères ayant les mêmes mouvements et les mêmes périodes que ces planètes réelles. On affirme que les moyens actuels utilisés pour étudier le système solaire font appel à des cadrans, des jauges, des engrenages et des cartes solaires. Observer cette horloge c'est comme regarder le système solaire lui-même. Usage principal: moyen pédagogique dans les écoles secondaires et les collèges. Clientèle secondaire: les planétariums, les établissements à vocation scientifique et les particuliers. Sont disponibles les données économiques, le know-how et la protection conférée par des brevets dans 16 pays, y compris le Canada. Numéro de référence A6656. Écrire à: Dr. Dvorkovitz & Associates, P.O. Box 1748, Ormond Beach (Floride) 32074 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 900 Coastal States Building, 260 Peachtree Street, Atlanta (Georgie) 30303 (É.-U.).

Horse Trailer/304

Swedish firm offers the manufacturing and marketing rights to a Canadian company to purchase the complete basic drawing data for its "Dala-vagnen" including technical specifications. This is a high quality transport trailer for horses which is to be drawn behind a passenger car. A royalty is required for each trailer sold. Interested parties should have facilities for hot dip galvanizing and glass fibre manufacturing. Axles and hitches can be supplied by the licensor. The Dala horse trailer is a high-quality wagon equipped with the latest devices for the horse's travelling comfort and safety on the road. Made of reinforced steel with plywood walls and a fibreglass roof, it can also be equipped with a special front door for loading. Write: Mr. Yngve Hallblom, Morasvets AB, Box 175, 792 01 Mora, Sweden and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

Remorque pour chevaux/304

Une société suédoise offre de vendre à une société canadienne la licence de fabrication et de commercialisation ainsi que les plans de construction et les caractéristiques de son "Dala-vagnen". Il s'agit d'une remorque de haute qualité pour le transport des chevaux qui peut être tirée par une voiture de tourisme. Un droit sera perçu sur chaque remorque vendue. Les parties intéressées doivent posséder des installations pour la galvanisation par immersion à chaud et pour la fabrication de la fibre de verre. Les essieux et les attelages peuvent être fournis par le donneur de licence. La remorque Dala est un chariot de haute qualité équipé des dispositifs les plus récents pour le confort et la sécurité des chevaux sur la route. Elle est construite en acier, ses parois sont recouvertes de contre-plaqué et son toit est en fibre de verre. Elle peut aussi être pourvue d'une porte avant spéciale pour faciliter le chargement de l'animal. Écrire à: M. Yngve Hallblom, Morasvets AB, B.P. 175, 792 01 Mora (Suède) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, B.P. 16129, S-103 23 Stockholm 16 (Suède).

Cast Iron Welding Techniques/304

American research organization offers the licensing rights to Canadian companies for techniques and cast iron weld-

Techniques de soudage de la fonte/304

Un organisme de recherche des États-Unis offre à des sociétés canadiennes les droits d'exploitation de tech-

ing which can be greatly improved by combining manganese and nickel in welding rods and fluxes. Disclosed by David L. Olson of the Colorado School of Mines and Marquez A. Davila of Venezuela's University of Simon Bolivar is an optimal material of about 20 percent manganese and 20 percent nickel which may replace high nickel "fillers." The combination melts at a lower temperature; is easy to machine; has expansion characteristics compatible with cast iron, and readily absorbs carbon from the cast iron which can form carbides and cause brittleness. The invention may facilitate increasing use of cast iron—relatively inexpensive to produce—as a replacement for steel castings. Write: Mr. H. Gordon Howe, Research Corporation Manager — Licensing, Research Corporation, 405 Lexington Avenue, New York, N.Y. 10174 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020, U.S.A.

niques susceptibles d'améliorer considérablement le soudage de la fonte en amalgamant du manganèse et du nickel dans les baguettes et les flux de soudage. Le matériau mis au point par MM. David L. Olson de la School of Mines du Colorado et Marquez A. Davila de l'université Simon Bolivar au Vénézuéla renferme 20 pour cent de manganèse et 20 pour cent de nickel et peut remplacer des métaux d'apport à haute teneur en nickel. Le matériau a un point de fusion inférieur et est facile à usiner; il possède des propriétés de dilatation compatibles à celles de la fonte et absorbe instantanément le carbone de la fonte pouvant former des carbures et causer une certaine fragilité. L'invention pourrait permettre l'utilisation croissante de la fonte, relativement peu coûteuse à produire, comme substitut des fontes d'acier. Écrire à: M. H. Gordon Howe, Research Corporation Manager — Licensing, Research Corporation, 405 Lexington Avenue, New York, N.Y. 10174 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 1251 Avenue of the Americas, New York City, N.Y. 10020 (É.-U.).

Folding Stroller and Low Beach Chair/304

American inventor offers a Canadian company licensing rights under his U.S. Patent Numbers 3,995,882 and 4,118,065 for a folding support structure for strollers and chairs featuring safe, simple designs, compactness, use of less tubing, are lightweight and entail fewer riveted joints. (See illustrations page 53.) Write: Convaid Marketing & Sales Co., Inc., P.O. Box 2731, Palos Verdes, California 90274 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

Poussette et chaise de plage pliantes/304

Un inventeur américain offre au marché canadien les droits de ses brevets américains n^{os} 3,995,882 et 4,118,065 d'un châssis pliant pour poussettes et chaises basses, respectivement, aux caractéristiques suivantes: sécurité, facilité de fabrication, encombrement et poids réduits, moins d'éléments tubulaires et de joints rivetés. (Voir les illustrations page 53.) Écrire à: Convaid Marketing & Sales Co., Inc., P.O. Box 2731, Palos Verdes (Californie) 90274 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 510 West Sixth Street, Los Angeles, Californie 90014 (É.-U.).

Electrostatic Emulsifier/304

The United Kingdom National Research Development Corporation offers the manufacturing and marketing rights under license in Canada for its improved method of emulsification through the use of electrostatic forces. This process is especially important for pressure-packaged aerosol products such as wax polishes, where a small percentage of the product needs to be evenly and finely distributed over a wide area. If the dispersed particles are small enough (typically 1-2 μm in diameter), then most emulsions are reasonably stable over a prolonged period of time. This is particularly important in the case of commercial products, which must have a reasonable shelf life. The University of Southampton has invented a method of electrostatic emulsification whereby a high direct voltage (40 kV) is applied to the first liquid as it emerges from an emitter nozzle. The effect of the induced charge is to cause the liquid to break up to produce an atomised spray which is then fed into a thin, moving layer of the second liquid. A three-year development programme financed by NRDC has been successfully completed and this shows that a satisfactory emulsion can be produced by electrostatic means at a rate comparable with methods at present in use by commercial enterprises. (See illustration page 53.) Write: National Research Development Corporation, 66-74 Victoria Street, London SW1E 6SL, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Émulseur électrostatique/304

La United Kingdom National Research Development Corporation offre les droits de fabrication et de commercialisation sous licence, au Canada, d'une méthode améliorée d'émulsionnement par forces électrostatiques. Il s'agit d'un procédé particulièrement important dans le cas des aérosols, notamment les cires pour les meubles, lorsqu'il s'agit de vaporiser uniformément et légèrement un faible volume de produit sur une grande surface. Si les particules vaporisées sont assez fines (1-2 μm de diamètre typique) la plupart des émulsions sont modérément stables durant de longues périodes, ce qui revêt une importance particulière dans le cas de produits commerciaux dont la durée d'entreposage doit être raisonnable. L'Université de Southampton a inventé une méthode d'émulsionnement électrostatique consistant à appliquer un courant continu sous forte tension (40 kV) au premier liquide, à sa sortie d'une buse. Le courant induit entraîne la désagrégation du liquide, ce qui produit un jet de pulvérisation dirigé vers une mince couche du second liquide en mouvement. Financé par la NRDC, un programme de mise au point de trois ans a été réalisé avec succès, démontrant qu'il est possible d'obtenir par méthode électrostatique une émulsion convenable à un rythme comparable à celui des méthodes actuellement utilisées dans l'industrie. (Voir l'illustration page 53.) Écrire à: National Research Development Corporation, 66-74 Victoria Street, Londres SW1E6SL (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commis-

Elimination of SO_2 From Combustion Products and Flue Gases/304

Czechoslovakian State foreign trade organization offers a licensing agreement in Canada for a method of eliminating SO_2 from combustion products and flue gases with the help of active soda (AKSO process), based on a heterogeneous reaction between solid anhydrous sodium carbonate and gaseous sulphur dioxide, while utilizing the fact that it is possible to prepare a sodium carbonate which is highly reactive towards sulphur dioxide. The optimum reaction temperature for eliminating sulphur dioxide using active soda lies in the region of 120 to 160°C, at concentrations which react with the gaseous component of the order of 10^{-1} vol. %. Under these conditions, active soda reacts rapidly and with a considerable sorption capacity resulting from the possibility of converting over 90% (maximum 97-98%) of the soda into sodium sulphite. The intensity of this process is best demonstrated on the high purification degree of the gas (over 99%) and the high degree of utilizing the solid matter (over 90%) at a mean contact time with the gas of the order of 10^{-2} sec. An important aspect is the presence of water vapour in the gaseous mixture, which acts as a gaseous catalyser. In the presence of oxygen and at temperature over 160°C, oxidation, causes the conversion of sodium sulphite into sodium sulphate, which results in a deceleration of the reaction and reduced utilization of the soda. Compared with other solid substances, active soda reacts with sulphur dioxide faster by at least one order at a higher sorption capacity of the soda. These parameters are the condition for a highly intensive and substantially cheaper process than when using other solid substances. The AKSO process further eliminates disadvantages inherent in wet processes: there is no need to cool the combustion products, reheating is eliminated; there is no need to change the technology of processing the combustion products, and the equipment can be situated at the tail end of the process, before discharging the gas into the atmosphere. Part of the license offer apart from patent rights is laboratory documentation, engineering data for the construction of the fluid-bed reactor with a capacity of 10,000 Nm^3 of combustion products p. hour, pilot-plant know-how on the preparation of active soda and on optimum operation of the AKSO process, reports on results of tests up to the present as well as technical assistance rendered by Czechoslovak experts when starting the AKSO process abroad. Write: Mr. Jan Volny, Polytechna, P.O. Box 834, Panska 9, 112 45 Praha 1, Czechoslovakia and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Mickiewiczova 6, 125 33 Prague 6, Czechoslovakia.

CORRECTION

Stable Liquid Aspirin/301

The reference to Stable Liquid Aspirin/301 published in the February, 1981 issue of the New Products Bulletin is not appropriate in that the product should have been listed as Stable Liquid ASA or Acetylsalicylic Acid. "Aspirin" is the Trade Mark for the brand of acetylsalicylic acid tablets registered to Sterling Drug Ltd. in Canada.

sariat du Canada, 1 Grosvenor Square, Londres, W1X 0AB (Angleterre).

Extraction du SO_2 des produits de combustion et des gaz de cheminés/304

L'organisme Tchécoslovaque de commerce extérieur offre sous licence les droits à une méthode d'extraction du SO_2 des produits de combustion et des gaz de cheminée. La méthode tchèque (procédé AKSO), basée sur une réaction hétérogène entre le carbonate de sodium anhydre solide et le dioxyde de soufre gazeux, et utilise le fait qu'il est possible de préparer du carbonate de sodium hautement réactif vis-à-vis du dioxyde de soufre. La température optimale de réaction se situe à 120-160°C à des concentrations de SO_2 de 0,1% en volume. Dans ces conditions, le carbonate réagit rapidement et sa capacité de sorption est considérable puisque plus de 90% (maximum 97-98%) peut être converti en sulfite de sodium. La qualité de ce procédé est évidente si l'on considère le degré de purification des gaz (plus de 99%) et le degré d'utilisation de la matière solide (plus de 90%) avec un temps de contact moyen des gaz de 10^{-2} seconde. L'aspect important est la présence de vapeur d'eau dans le mélange gazeux, car cette vapeur d'eau agit comme catalyseur. En présence d'oxygène et à une température de plus de 160°C, le sulfite de sodium est oxydé en sulfate de sodium, ce qui entraîne un ralentissement de la réaction et une baisse de l'utilisation du carbonate. Par rapport à d'autres substances solides, le carbonate de sodium activé réagit environ dix fois plus vite avec le dioxyde de soufre et a une capacité de sorption supérieure. Ceci fait que le procédé AKSO est beaucoup plus intense et substantiellement moins coûteux que les autres procédés utilisant des substances solides. Par ailleurs, il élimine les difficultés associées aux procédés par voie humide: il n'est pas nécessaire de refroidir les produits de combustion, ce qui évite le réchauffage; il est inutile de modifier la technique de traitement des produits de combustion et l'équipement d'épuration peut être situé à l'extrémité du circuit des gaz, juste avant la libération dans l'atmosphère. La licence permet d'obtenir, en plus des droits au brevet, la documentation de laboratoire, les données techniques pour la construction de réacteurs à lit fluidisé ayant une capacité de 10 000 m^3 de produits de combustion à l'heure, l'accès aux connaissances acquises à l'échelle pilote dans la préparation du carbonate et l'exploitation optimale du procédé, les rapports sur les résultats des essais effectués jusqu'à maintenant, ainsi que l'aide technique d'experts tchèques lors du démarrage du procédé AKSO à l'étranger. Écrire à: M. Jan Volny, Polytechna, boîte postale 834, Panska 9, 112 45 Praha 1 (Tchécoslovaquie) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Mickiewiczova 6, 125 33 Prague 6 (Tchécoslovaquie).

RECTIFICATION

Aspirine liquide stable/301

La mention d'aspirine liquide stable/301, dans le numéro de février 1981 du Bulletin de produits nouveaux, ne convient pas. Il aurait fallu plutôt mentionner liquide stable AAS ou acide acétylsalicylique. "Aspirin" est la marque de commerce des comprimés d'acide acétylsalicylique déposée par la Sterling Drug Ltd., au Canada.

Canadian Patents Available for Licensing or Sales Issued March 1981

Note:
Résumés of the following of Canadian Patents are published in the language of application, English or French.

Brevet 1,096,637

Système de recueillage de sève/304

Un système de recueillage de sève dans une érablière est décrit. Le système comprend les éléments conventionnels suivants: un chalumeau pour fixation au tronc de chaque érable, une tubulure principale composée de tuyaux s'étendant d'un arbre à un autre, un raccord en T ayant deux branches alignées servant à relier les tuyaux à la base de chaque arbre et un tuyau latéral reliant chaque chalumeau à la troisième branche du raccord en T. Le système est caractérisé par le fait que le tuyau latéral est détachable facilement de la troisième branche du raccord en T et qu'un bouchon amovible sert à sceller cette troisième branche. En

Liste des brevets canadiens disponibles pour octroi de licence ou vente délivrés en mars 1981

Note:
Des résumés des brevets canadiens ci-joints sont publiés dans la langue de la demande de brevet, en anglais ou en français.

Patent 1,096,637

Sap Collecting System/304

dehors de la saison de recueillage, l'on enlève le chalumeau et le tuyau latéral et l'on bouche la troisième branche. Ainsi, l'on peut laver la tubulure principale de façon efficace. Celle-ci peut donc être laissée en place entre les saisons de recueillage et les rongeurs ne l'attaqueront pas. Écrire: Benoit Lemieux, 1315 Notre-Dame Est, Victoriaville, G6P 4B8, Québec et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, Ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Patent 1,096,646

Method and Apparatus for Improving Soft Viscous Ground/304

For improving the strength of an area of some extent, hardenable liquid consisting essentially of cement milk is injected into each one of a plurality of preselected points for promoting dehydration and compaction of the ground. The liquid is hardened in a short time for forming a rigid tree-like structure. A measure or index for the local ground strength is obtained at first by using a measuring/injection device, and the injection pressure is set to be slightly

Brevet 1,096,646

Méthode et appareil pour consolider les sols mous/304

larger than the measure or index so obtained. The liquid may then be permeated into the soft viscous ground at substantially the same injection pressure until the ground is consolidated satisfactorily. Write: Yuichiro Takahashi, No. 6-2, 1-chome, Bandai, Nigata-shi, Nigata-Ken, Japan and send a copy of your initial correspondence to Commercial Division, Embassy of Canada, 3-38 Akasaka 7 — Chome, Minato-ku, Tokyo 107, Japan.

Patent 1,096,729

Self-Contained Heating Apparatus/304

An apparatus adapted for mounting in a fireplace includes an air chamber surrounding a combustion chamber. An air mover is provided for circulating air through the air chamber and outwardly from air ducts which extend across the combustion chamber. Write: Richard O. Scharen,

Brevet 1,096,729

Appareil de chauffage intégré/304

461 Blackstone, Springfield, Oregon 97477 and send a copy of your initial correspondence to Canadian Consulate General, 412 Plaza 600, Sixth and Stewart, Seattle, Washington 98101, U.S.A.

Patent 1,096,812

Laser-Induced Separation of Hydrogen Isotopes in the Liquid Phase/304

Hydrogen isotope separation is achieved by either (a) dissolving a hydrogen-bearing feedstock compound in a liquid solvent, or (b) liquefying a hydrogen-bearing feedstock compound, the liquid phase thus resulting being kept at a temperature at which spectral features of the feedstock

Brevet 1,096,812

Séparation des isotopes d'hydrogène en phase liquide à l'aide d'un laser/304

relating to a particular hydrogen isotope are resolved, i.e., a clear-cut isotope shift is delineated, irradiating the liquid phase with monochromatic radiation of a wavelength which at least preferentially excites those molecules of the feedstock containing a first hydrogen isotope, inducing

photochemical reaction in the excited molecules, and separating the reaction product containing the first isotope from the liquid phase. Write: Mr. James E. Denny, Assistant General Council for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Brevet 1,097,111

Fiche de connecteur fibre à fibre pour câble optique multifibre/304

Fiche de connecteur fibre à fibre pour câble optique multifibre. Les fibres sont bloquées dans les sillons formés entre des tiges cylindriques de maintien qui sont appuyées sur une surface rigide plane, et qui sont serrées entre des tiges de guidage, du type mâle-femelle, et de butée, de plus grand diamètre. Écrire: Compagnie Générale d'Électricité, 54, rue La Boétie, 75382 Paris, Cédex 08, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Patent 1,097,111

Fiber-to-Fiber Connector Plug for Multifiber Optic Cable/304

Patent 1,097,176

Terminal Elevator Threshing Device/304

When grain is separated at a terminal or elevator for example, a relatively large number of unthreshed grain heads are separated. These are fed into a hopper and then into the feed box of the device. This feeds the heads into a thresher on each side of the feed box and the threshed grain and chaff are discharged through a common discharge for further separation. Access to the interior is by means of a hinged wall section on each side and a stone trap is provided centrally of the feed box. Write: Andrew F. Alm, 1333 Connaught Avenue, Moose Jaw, Saskatchewan S6H 4B9 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Brevet 1,097,176

Dispositif de battage pour silo/304

Patent 1,097,325

Line Hauler for Crab Pots and the Like/304

A long life crab pot hauling system is provided with longer life than before available in a harsh salt water marine environment and with operation from an energy saving low power gasoline motor capable of dislodging a crab pot from the bottom of a body of water and hauling it up into a vessel without stalling. This is accomplished by a line hauler sheave having a heavy flywheel effect provided by a pair of separated flywheels of cast iron or the like between which is affixed respectively to each flywheel a pair of replaceable sheave members of a salt water and wear resistant material such as stainless steel forming an inclined groove for frictionally receiving the hauling line therebetween with said flywheel-sheave assembly being driven by the low power gasoline motor that can be readily carried on a small boat or skiff that services a line of crab pots. Only the sheave members are replaced after wear or corrosion caused by the lines. Write: Joseph S. Ruark, 617 South Street, Easton, Maryland 21601 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Brevet 1,097,325

Treuil à palangre pour nasses à crabes ou autres dispositifs du genre/304

Patent 1,097,389

Load Carrying Platform/304

A platform for use on a half-ton truck or other vehicle includes a rectangular frame with an open rear end, an extension on such open rear end pivotally connected to the frame for movement between a load-carrying or closed position at a right angle to the frame and a loading or open position, in which the extension forms a straight line continuation of the open rear end of the frame; the opposing sides of the frame and of the extension having tracks for slidably receiving a load-carrying deck; and a latch on each side of the frame and extension for locking the extension in the load-carrying position, with the deck held firmly in the frame. Write: Wilfred Litwin, 8544 — 93 Avenue, Fort Saskatchewan, Alberta T81 2R4 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Brevet 1,097,389

Plate-forme de levage/304

Patent 1,097,925

Method for the Recovery of Actinide Elements from Nuclear Reactor Waste/304

A process for partitioning and recovering actinide values from acidic waste solutions resulting from reprocessing of irradiated nuclear fuels by adding hydroxylammonium nitrate and hydrazine to the waste solution to adjust the valence of the neptunium and plutonium values in the solution to the +4 oxidation state, thus forming a feed solution and contacting the feed solution with an extractant of dihexoxyethyl phosphoric acid in an organic diluent whereby the actinide values, most of the rare earth values and some fission product values are taken up by the extractant. Separation is achieved by contacting the loaded extractant with two aqueous strip solutions, a nitric acid solution to selectively strip the americium, curium and rare earth values and an oxalate solution of tetramethylammonium hydrogen oxalate and oxalic acid or trimethylammonium hydrogen oxalate to selectively strip the neptunium, plutonium and fission product values. Uranium values remain in the extractant and may be recovered with a phosphoric acid strip. The neptunium and plutonium values are recovered from the oxalate by adding sufficient nitric acid to destroy the complexing ability of the oxalate, forming a second feed, and contacting the second feed with a second extractant of tricaprylmethylammonium nitrate in an inert diluent whereby the neptunium and plutonium values are selectively extracted. The values are recovered from the extractant with formic acid. Write: Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Brevet 1,097,925

Méthode de récupération des actinides des déchets de réacteurs nucléaires/304

Patent 1,097,591

Storable Boom Attachment for a Construction Machine/304

This invention relates to a storable hoisting gin or boom member attachment for bucket loaders which provides an arrangement for quickly and easily moving a boom member or gin pole into working relationship with respect to a bucket loader so that this type of construction vehicle may be used for lifting and lowering objects in construction work. The attachment consists of supports welded to the top side of the bucket, each support including a pivot flange and a retaining flange to which the boom or gin is attached. Each pivot flange permits pivoting of the boom member to a collapsed position on an opposite support on the top side of the bucket for storage purposes. Write: Earl W. Sornsin, 1743 South 9th, Fargo, North Dakota 58102 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402, U.S.A.

Brevet 1,097,591

Flèche amovible pour machine de construction/304

Patent 1,097,568

Rocking-Piston Machine/304

A rocking-piston machine is provided with at least one cylinder, wherein a skirtless rocking piston reciprocates. The rocking piston is connected rigidly with a connecting rod which is articulated to a crankshaft or eccentric shaft. The cylinder has a circular, oval, square, rectangular or any other suitable cross-section and is waisted substantially according to the rocking movement of the edge of the rocking piston. The rocking piston and connecting rod assembly comprise means for guiding said assembly in the cylinder under prestress, which prestress is at least partially controlled by a fluid and increases automatically with increasing speed of the machine. The improved rocking-piston machine runs relatively smoothly and quietly compared to the prior art devices and gives superior guidance of the rocking pistons in their waisted cylinders. Write: Willi E. Salzmann, Bielstrasse III, CH 4500 Solothurn, Switzerland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Kirchenfeldstrasse 88, 3005 Berne, Switzerland.

Brevet 1,097,568

Machine oscillante à piston/304

Patent 1,097,625

Water Soluble Anthraquinone Dye/304

A new water soluble dye of the anthraquinone series is provided by reacting 1-amino-2-bromo-4-hydroxyanthraquinone with p-(α,α-dimethylbenzyl)phenol and sulfonating the reaction product with oleum under conditions that provide monosulfonation. The resulting acid dye has outstanding strength and fastness properties when used as a colorant for nylon fiber. Write: American Color & Chemical Corporation, 11400 Westinghouse Boulevard, Charlotte, North Carolina 28202 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

Brevet 1,097,625

Colorants anthraquinoniques solubles dans l'eau/304

Patent 1,097,856

Machine for Stripping Material from a Surface/304

A machine for shredding and removing a resilient covering material from a floor surface has a portable base structure defining an open bottomed shredding chamber and a motor unit adjustably supported on the base structure for rotating a wire brush within the shredding chamber. The brush is adjustable to a desired elevated and inclined position relative to the floor surface to facilitate the shredding action and removal of the covering material from the machine. The base structure is supported on thin disk shaped wheels adapted for penetrating the covering material substantially to the level of the floor surface. Write: John E. Schlemmer, 10 Southview Drive, Grundy Center, Iowa and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

Brevet 1,097,856

Machine pour dégarnir une surface de son revêtement/304

Patent 1,097,924

Method for Recovering Palladium and Technetium Values from Nuclear Fuel Reprocessing Waste Solutions/304

A method for recovering palladium and technetium values from nuclear fuel reprocessing waste solutions containing these and other values by contacting the waste solution with an extractant of tricaprylmethylammonium nitrate in an inert hydrocarbon diluent which extracts the palladium and technetium values from the waste solution. The palladium and technetium values are recovered from the extractant and from any other coextracted values with a strong nitric acid strip solution. Write: Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Brevet 1,097,924

Méthode de récupération du palladium et du technétium des solutions usées de retraitement du combustible nucléaire/304

Patent 1,097,977

Transport Attachment for Packer Drills and the Like/304

Packer drills and the like are usually loaded onto a two-wheeled dolly or the like for transportation purposes and then pulled by a tractor. This is because such devices normally do not include rear wheels, but ride on the packer wheels or elements. This is, of course, awkward for transportation particularly when relatively wide articulated packer drill assemblies have to be moved. With the present device, a rear castor wheel assembly is secured to each side of the rear end of each section and fluid operators raise and lower these ground engaging castor wheels. When lowered for transport, a lever and cable arrangement which is operatively connected to the packer wheel unit, lifts the packer wheel units clear of the ground. When the castor wheel assemblies are raised for field use, the packer wheel units are lowered to the operating position. Write: Larrie M. Macknak, P.O. Box 41, Dysart, Saskatchewan S0G 1H0 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Brevet 1,097,977

Dispositif de transport pour foreuse de packer et autres engins du genre/304

Patent 1,098,062

Process for the Recovery of Organic Gases from Ground, Bedrock or Bottom Sediments in Lakes/304

A process for the in situ recovery of organic gases from ground, bedrock or bottom sediments in lakes is described. Water containing microorganisms (e.g. methane bacteria) and/or substances promoting the growth thereof is pumped down through injection wells or pipes, and water containing organic gases produced by said microorganisms is pumped up through extraction wells or pipes. The organic gases are then released by pressure reduction of the water. Preferably the water is pumped in a closed circuit. Write: Vyrmetoder AB, Näsbydalsvägen 33 A, 18331 Taby, Sweden and send a copy of your initial correspondence to the Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden

Brevet 1,098,062

Méthode d'extraction des gaz organiques emmagasinés dans le sol ou les strates rocheuses, ou dégagés par les sédiments déposés au fond des lacs/304

Brevet 1,098,324

Base de temps/304

Base de temps comportant trois générateurs synchronisés qui délivrent chacun un signal d'horloge 2h et un signal de synchronisation Sy utilisé pour la synchronisation des trames. Chaque générateur comporte un oscillateur piloté par un comparateur de phase recevant les trois signaux d'horloge et par un circuit d'asservissement interne recevant un signal lié au signal de synchronisation extérieure et/ou un signal lié au signal de synchronisation Sy propre au générateur, le signal de synchronisation Sy étant synchronisé par un circuit majoritaire recevant les signaux de synchronisation Sy des trois générateurs. Application aux installations de traitement de l'information, et notamment les centraux téléphoniques. Écrire: Compagnie Industrielle des Télécommunications Cit-Alcatel, 12, rue de la Baume, 75008 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Patent 1,098,324

Time Base/304

Patent 1,098,343

Method for Manufacture of Magnesium Composite and Method for Manufacture of Hydrogen by Said Composite/304

A method for the manufacture of a magnesium composite comprising placing magnesium and a metal powder selected from the group consisting of chromium, iron, manganese, nickel, zinc and oxides thereof in a container; applying mechanical force to the magnesium and metal powder mixture whereby 0.01% to 30% by weight of the metal powder is embedded in the magnesium; and removing any excess of the metal powder not embedded in the magnesium. Write: Masahiro Suzuki, 423 Yasaka, Kakegawa-shi, Shizuoka-ken, Japan and send a copy of your initial correspondence to Commercial Division, Embassy of Canada, 3-38 Akasaka 7 — Chome, Minato-ku, Tokyo 107, Japan.

Brevet 1,098,343

Procédé industriel d'obtention d'un mélange contenant du magnésium et procédé industriel d'obtention d'hydrogène à partir de ce mélange/304

Patent 1,098,376

Insulated Shuttered Window/304

A window unit has a frame which encloses an insulated rigid shutter. This shutter is movable between a storage space in the window frame and a second position in the frame between two panes of glass. The shutter is moved by means of a cord. Write: Bernard A. Melanson, R.R. 3, Site 11, Box 46, Fredericton, N.B. E3B 4X4; George S. Read, Compartment 9, Site 26, R.R. 6, Fredericton, N.B. E3B 4X7 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Brevet 1,098,376

Fenêtre isolante à persienne/304

Patent 1,098,377

Elements for Supporting and Bracing Sealed-Glazing Units/304

In an element for supporting and bracing sealed glazing units or other plate-like bodies in a surrounding frame, there is described an improved element which may be resiliently deformed to thereby enable the element to be used in the installation of glazed windows or other plate like units of varying sizes. Known supporting elements are not so resiliently deformable and are therefore not adaptable for use with window units of varying widths. In this invention, two parallely extending edge ribs are interconnected by a web which may be resiliently and elastically deformed to change the distance between the edge ribs. After being deformed, the web, due to its elasticity, tends to restore itself towards its original dimensions, thereby gripping opposite sides of the supporting frame. Write: Lars Eriksson, Storgatan 40, S-361 00 Emmaboda, Sweden and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

Brevet 1,098,377

Éléments pour supporter et contreventer des vitrages scellés/304

Patent 1,098,641

Writing Implement Modified with Plastics/304

A writing implement modified with plastic, which comprises 0,5 to 60 parts by weight of a first thermoplastic component consisting of polyethylene, 0,5 to 80 parts by weight of a second thermoplastic component selected from the group consisting of polyethylene glycol, non ionic, synthetic and water-soluble waxes, non ionic ethyl-

Brevet 1,098,641

Instrument d'écriture modifié avec des matières plastiques/304

eneoxide adducts of higher fatty acids, and mixtures thereof, 1 to 30 parts by weight of colour pigments and 0,5 to 50 parts by weight of fillers. The whole trace provided by the writing implement of the invention can be spread by means of water or other solvents. Write: Koh-i-noor Hardtmuth, Oborovy Podnik, Ceské Gudejovice, Czechoslovakia and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Mickiewiczova 6, 125 33 Prague 6, Czechoslovakia.

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DOE
Mr. James E. Denny
Assistant General Counsel for Patents
Office of the General Counsel
U.S. Department of Energy
Washington, D.C. 20545

NASA
Negotiating centers for NASA patent applications and the Canadian trade offices concerned are listed with the item.

Les centres de négociation pour les demandes de brevet de la NASA et les bureaux commerciaux du gouvernement canadien concernés sont indiqués avec l'article.

PAT-APPL-6-180 542

Improving the Removal of Lint from Cottonseed/304

Filed August 25, 1980, by the Department of Agriculture. This invention relates to wet chemical processing of cotton prior to ginning. The removal of lint fibers from the cottonseed is facilitated by aqueous pretreatments of the cotton boll with dilute chemical substances. The wet processing of the boll renders the lint amenable to easy removal from the seedcoat in the wet or dry states. Write: NTIS.

Enlèvement facilité de la charpie de la graine de coton/304

PAT-APPL-6-180 546

Solubilization of Lignocellulosic Materials/304

Solubilisation de matériaux lignocellulosiques/304

Filed August 25, 1980, by the Department of Agriculture. The solubilization of lignocellulosic fibrous material is accomplished by a simple and expedient process consisting of impregnating the selected lignocellulosic material with one of a group of certain swelling agents, allowing a sufficient amount of time until the desired degree of swelling is achieved, then subjecting the swollen fibers to irradiation from a gamma radiation source. Write: NTIS.

PAT-APPL-6-187 380

Apparatus for Removing Corn from Cob/304

Appareil pour égrener le maïs/304

Filed September 15, 1980, by the Department of Agriculture. An apparatus for removing intact kernels of corn from the cob is described. The apparatus of the invention includes a frame with friction means attached thereto for removing whole, intact kernels of corn from the cob. Also attached to the frame are means for driving the friction means, and means for maintaining the friction coefficient of the friction means. Write: NTIS.

PAT-APPL-6-187 382

Direct Extraction Process for the Production of a White Defatted Food-Grade Peanut Flour/304

Processus d'extraction directe pour la production de farine d'arachide de qualité alimentaire, blanche et dégraissée/304

Filed September 15, 1980, by the Department of Agriculture. A white, defatted, food-grade peanut flour having an unusually high protein solubility and being suitable for human consumption is disclosed. Peanuts are heated, in preparation for blanching, at temperatures of about 220-250 F, for a period of time sufficient to eliminate the raw peanut taste. The peanuts are blanched, remoisturized without heat, flaked, solvent extracted, filtered, desolventized and ground into flour. Write: NTIS.

PAT-APPL-6-150 323

Laser Stimulated Raman Molecular Beam Time and Frequency Standard/304

Étalon de temps et de fréquence par effet Raman stimulé (par laser) sur un faisceau moléculaire/304

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed May 16, 1980, by the Department of the Air Force. This invention relates to a laser stimulated Raman molecular beam time and frequency standard utilizing a first electromagnetic beam at a first preselected frequency to pump a molecular beam at a first preselected point along the beam to state select the beam. A second electromagnetic beam (produced from either a different electromagnetic source than utilized to produce the first beam or produced from a portion of the first beam) at a second preselected frequency and a third electromagnetic beam at the first frequency simultaneously pump the molecules of the state selected molecular beam at a second point along the beam in a stimulated Raman process. By locking the frequency difference of the first and second electromagnetic beams to a specific resonant frequency, a time and frequency standard can be produced. Write: NTIS.

PAT-APPL-6-161 185

Microwave Power Level Stabilizing Circuit for Cesium Beam Frequency Standards/304

Circuit de stabilisation de la puissance hertzrienne pour étalons de fréquence à faisceau de caesium/304

Filed June 19, 1980, by the Department of the Air Force. Perceived atomic resonance frequency error resulting from microwave power level changes in atomic clocks is eliminated by controlling the device's microwave power source output in response to deviations from a fixed frequency relationship between the main atomic peak and a sidelobe peak of the atomic beam frequency spectrum. This is accomplished by a microwave power control servo system that includes a time sharing interrogation circuit for detecting and monitoring the frequencies of the main atomic peak and the sidelobe peak and a comparator that compares the frequencies of the main atomic and sidelobe peaks and generates a feedback control signal in response to frequency differences between the two that deviate from

a fixed difference frequency. The feedback signal is used to control the microwave power source output in a manner that constrains the main atomic peak and the sidelobe peak at a fixed offset frequency. Write: NTIS.

PAT-APPL-6-163 134

Symmetrical Diphosphate-traazacyclooctatetraenes/304

Diphosphatétrazacyclooctatétraènes symétriques/304

Filed June 26, 1980, by the Department of the Air Force. This invention relates to a method for synthesizing symmetrical diphosphatetraazacyclooctatetraenes and the products produced thereby. The synthesis involves effecting a reaction between an diaryltrihalophosphorane and a perfluoroalkyl amidine in the presence of an acid acceptor. Write: NTIS.

PAT-APPL-6-163 135

Unsymmetrical Diphosphate-traazacyclooctatetraenes/304

Diphosphatétraazacyclooctatétraènes asymétriques/304

Filed June 26, 1980, by the Department of the Air Force. This invention describes a method for preparing unsymmetrical diphosphatetraazacyclooctatetraenes and the novel products produced thereby. The synthesis involves an interaction between an imido-tetraaryl-diphosphinic acid trihalide and a perfluorinated imidoylamidine in the presence of an acid acceptor. Write: NTIS.

PAT-APPL-6-169 020

Temperature Sensing Assembly/304

Dispositif capteur de température/304

Filed July 15, 1980, by the Department of the Air Force. A temperature sensing assembly which continuously senses the temperature of one constituent stream, of a plurality of constituent streams, of a flow of a gaseous medium, and, as a result of such sensing, generates pneumatic servo-pressure to drive air valves, which control the flow of another one or more of the constituent streams, to open and shut in accordance with specific requirements. The assembly includes: a temperature sensing subassembly that senses the temperature of a first constituent stream of gaseous flow and that further includes a plurality of adjacent, captively-held, bimetallic discs which contract or expand in accordance with preselected ranges of temperatures, and a co-acting spring-loaded ball valve subassembly; an air valve subassembly that selectively prevents the flow of a second constituent stream of the same gaseous flow, in response to actuation of the temperature sensing subassembly; and, a conduit that interconnects the temperature sensing subassembly and the air valve subassembly, and that conducts bleeding air, when flowing, from the latter to the former and then overboard. Write: NTIS.

PAT-APPL-6-175 793

Method for Testing and Analyzing Surface Acoustic Wave Interdigital Transducers/304

Méthode d'essai et d'analyse des transducteurs interdigitaux à onde acoustique de surface/304

Filed August 6, 1980, by the Department of the Air Force. Nondestructive testing and analyzing of surface acoustic wave (SAW) interdigital transducers is accomplished by observing electro-optic changes in a layer of liquid crystals produced by the effects of electric fields resulting from an electrical potential applied to the transducer. A display cell comprising a liquid crystal layer covered with a gold coated glass coverplate is fabricated on the surface of the SAW substrate under test. The assembled display cell is positioned for viewing under a microscope equipped for vertical illumination by a light source and a beam splitter. Polarizers are positioned in the illumination and viewing paths. An electrical potential is applied to the SAW device transducers and in some instances to the coverplate gold cost. Electro-optic effects produced in the liquid crystal by the electric field effects of the applied electrical potential are viewed through the microscope and are analyzed and interpreted. Write: NTIS.

PAT-APPL-6-175 795

Adaptive Interference Tracker for Suppression of Narrow Band Interference/304

Filtre à accord automatique pour la suppression du brouillage à bande étroite/304

Filed August 6, 1980, by the Department of the Air Force. Adaptive filtering of narrow band interference is achieved by means of a circuit that automatically estimates the amplitude and frequency of narrow band interference in the

presence of a wide band signal. The estimate of the interference is subtracted from the input signal. Sample data baseband signals are processed in order to estimate the frequency and amplitude of interfering signals. The filter employs two tracking loops which act together to provide a second order tracking function. The first tracking loop provides a smoothed estimate of the interference. The second tracking loop provides a signale that adjusts a phase shifter to track the interfering signal frequency. Subtraction of the estimated interference from the input signal provides an output signal with attenuated interference and that is only slightly distorted. Write: NTIS.

PAT-APPL-6-176 434

Simultaneous Signal Detector for an Instantaneous Frequency Measurement Receiver/304

Détecteur de signaux simultanés pour récepteur de mesure instantanée de fréquences/304

Filed August 8, 1980, by the Department of the Air Force. An apparatus for use in conjunction with an instantaneous frequency measurement (IFM) receiver, for detection the presence of two or more signals, differing in frequency, between the onset of the first RF signal pulse and the completion of the frequency encoding strobe. High frequency sample and hold circuits detect the level of the video upon stabilization of the leading edge of the first pulse. Thereafter, comparators monitor both the video and sampled levels to detect defined differences there between. Monitoring ceases at the termination of the frequency encode strobe. Ambiguities in the encode frequency are detected by comparator unbalances, which actuate the inputs to a logic OR gate. The output of the OR gate is connected to a logic AND gate, whose other input changes level upon the termination of the encode strobe. The output of the AND gate latches an alarm, signalling the IFM receiver that the frequency measurement is ambiguous. Write: NTIS.

PAT-APPL-6-176 435

Self-Calibrating Interferometer/304

Interféromètre à étalonnage automatique/304

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed August 8, 1980, by the Department of the Air Force. A self-calibrating interferometer which forms therein a pair of Michaelson interferometers with one beam length of each Michaelson interferometer being controlled by a common phase shifter is the object of this invention. The transfer function measured from the phase shifter to either of a pair of detectors is sinusoidal with a full cycle for each half-wavelength of phase shifter travel. The phase difference between these two sinusoidal detector outputs represents the optical phase difference between a path of known distance and a path of unknown distance. Write: NTIS.

PAT-APPL-6-176 436

Fiber Optic Switching Device/304

Dispositif de commutation de fibres optiques/304

Filed August 8, 1980, by the Department of the Air Force. This invention relates to an electro-optical crystal slab defining an optical waveguide modulator between two parallel boundary regions. Each boundary region has electrodes next to the channel and a doped area immediately outside the region. An electric field applied via the boundary electrodes creates a low index of refraction and transmitted light remains in the waveguide. When boundary fields are removed some light is absorbed by the doped material. Fields applied to compensating electrodes lower the index of refraction of the doped area so that the light is directed into it and absorbed. Any light passing through the absorbing material is contained in an alternate channel. Write: NTIS.

PAT-APPL-6-177 335

Air Assist Apparatus for Gas Turbomachine Augmentor Spraying/304

Dispositif pneumatique (auxiliaire) de pulvérisation pour turbine à gaz/304

Filed August 12, 1980, by the Department of the Air Force. This apparatus includes: an aerodynamically configurated air manifold which surrounds the fuel-carrying and emitting spraying in the afterburner section of a gas turbine power plant, with a plurality of orifices in the air manifold located such that they align with, and face in the same direction as, the respective plurality of orifices in the spraying; and, a conduit which carries air that is bled from the compressor section to the air manifold, with the air flow in the conduit controlled by a conduit valve, so that the bled air can be selectively introduced into the air manifold. Combustion efficiency is increased, and rumble instability is decreased, because better fuel atomization and vaporization is allowed by the greater and better intermixture of the fuel from the spraying orifices, and the air from the air manifold orifices, by the air flow impinging upon, surrounding, and intermixing with the exiting fuel flow. Write: NTIS.

PAT-APPL-6-178 042

Continuous Force Actuator/304

Actionneur à pression constante/304

Filed August 14, 1980, by the Department of the Air Force. A continuous force actuator having a housing, a pair of slidably mounted T-shaped pistons therein and a plurality of resilient, hollow pressure tubes surrounding each of the pistons. The insertion of fluid into or the removal of fluid from the resilient tubes alters the position of the pistons relative to the housing and thereby controls the continuous force applied by the actuator. By operably connecting the continuous force actuator between opposite components of, for example, a variable configurated airfoil, continuous control of the airfoil configuration can be performed in a reliable and accurate manner. Write: NTIS.

PAT-APPL-6-104 499

Preparation of TNT-Thermoplastic Polymer Granules Readily Soluble in a TNT Melt/304

Préparation de granules de TNT et de polymère thermoplastique facilement soluble dans le TNT fondu/304

Filed December 17, 1979, by the Department of the Army. A process is provided for preparing a composition composed of TNT and a thermoplastic organic polymer containing as high as 30-35% of the polymer, in the form of a granular product, which is rapidly soluble in a TNT melt. The process involves preparing a solution of the TNT and the polymer in methyl ethyl ketone solvent and diluting the solution with water to precipitate the TNT-polymer composition as granules, which can be readily separated by filtration and are rapidly soluble in molten TNT. Write: NTIS.

PAT-APPL-6-119 274

Directional Two-Axis Differential Optical Inclinometer/304

Inclinomètre optique directionnel sur deux axes/304

Filed February 7, 1980, by the Department of the Army. A directional two-axis differential optical inclinometer which includes light sources and optical detectors in two different systems for determining angle change in a test table and the direction of change from the horizontal plane. Write: NTIS.

PAT-APPL-6-119 275

Directional Two Axis Optical Inclinometer/304

Inclinomètre optique directionnel sur deux axes/304

Filed February 7, 1980, by the Department of the Army. This invention relates to an inclinometer which employs a laser light source with a transparent liquid and a gas and the laws of optics to reflect the light source to a detector which provides signals for measuring the tilt angle and the direction of tilt from the local horizontal. Write: NTIS.

PAT-APPL-6-122 780

Method and Apparatus for Calibrating Gyroscopically-Stabilized, Magnetically-Slaved Heading Reference System/304

Méthode et appareil permettant d'étalonner un système de référence de cap à stabilisation gyroscopique et asservissement magnétique/304

Filed February 19, 1980, by the Department of the Army. A heading reference system mounted in a vehicle, e.g. an aircraft or a tank, includes a magnetic compass and a gyroscope. The magnetic compass is subject to deviation in the magnetic field, hence the system must be calibrated. If the vehicle is oriented in a starting direction, and the output of the magnetic compass compared to the output of the gyroscope, an error signal is developed. This error signal is filtered to reduce noise, then stored. The vehicle is then reoriented and the procedure repeated until sufficient information is available to calibrate the system. A microprocessor may be used for the computations and filtering of noise. Write: NTIS.

PAT-APPL-6-126 803

Fatigue Cycle Sensor/304

Capteur de fatigue/304

Filed March 3, 1980, by the Department of the Army. A fatigue cycle sensor can integrate force with respect to time. The sensor has a body with a bore. A plunger is mounted in the bore for relative motion therethrough in re-

sponse to force applied behind the plunger. The plunger is sized for an interference fit in the bore. This interference fit results in deformation in response to relative motion between the plunger and body. The foregoing sensor has many applications including estimating fatigue in weapons. Write: NTIS.

PAT-APPL-6-126 804

Multiple Wedge Element Lens for an Ultrasonic Inspection Transducer/304

Lentille à coins multiples pour transducteur de contrôle ultrasonique/304

Filed March 3, 1980, by the Department of the Army. A plurality of flat or curved, wedge-shaped elements form the surface of a lens of an ultrasonic inspection transducer. The multiple wedge-shaped elements permit the ultrasonic energy from the transducer to be focused in a substantially straight line (line focus) parallel to the axis of the lens and deflected from a plane parallel to the wedge-shaped elements and at an oblique angle to the line focus. This achieves a concentration of ultrasonic energy along a line that can be projected into material as shear waves while maintaining equidistance from the transducer's sensing wafer. This results in a concentration of ultrasonic energy that can detect small cracks in a workpiece. Write: NTIS.

PAT-APPL-6-127 331

Precision Optical Inclinometer/304

Inclinomètre optique de précision/304

Filed March 3, 1980, by the Department of the Army. An inclinometer which employs a light and the laws of optics for measuring the tilt angle from the local horizontal. The local horizontal is established by using a low viscosity reflecting liquid. An interferometer sums two light beams at a predetermined point and the resulting interference fringe pattern is detected by a detector. The fringe pattern changes as the test table changes pitch angles. Write: NTIS.

PAT-APPL-6-134 680

Cable Guide for Powered Winch/304

Guide-câble pour treuil motorisé/304

Filed March 28, 1980, by the Department of the Army. This invention relates to a cable guide for a powered winch in a military vehicle. The improvement consists of a cable guide that includes three rollers having concave edge surfaces guidably engaged with segmental surface areas of the cable. One of the rollers is carried by an auxiliary frame that can be swung away from its normal position to thread or unthread the cable. The three rollers are equi-spaced around the cable guide space so that normal cable loads are borne by at least two of the rollers. Write: NTIS.

PAT-APPL-6-138 967

Radiation Energy Detector and Analyzer/304

Détecteur et analyseur d'énergie de rayonnement/304

Filed April 10, 1980, by the Department of the Army. A radiation detector array and a method for measuring the spectral content of radiation. The radiation sensor or detector is an array or stack of thin solid-electrolyte batteries. The batteries, arranged in a stack, may be composed of independent battery cells or may be arranged so that adjacent cells share a common terminal surface. This common surface is possible since the polarity of the batteries with respect to an adjacent battery is unrestricted, allowing a reduction in component parts of the assembly and reducing the overall stack length. Additionally, a test jig or chamber for allowing rapid measurement of the voltage across each battery is disclosed. A multichannel recorder and display may be used to indicate the voltage gradient change across the cells, or a small computer may be used for rapidly converting these voltage readings to a graph of radiation intensity versus wavelength or energy. The behavior of the batteries when used as a radiation detector and analyzer are such that the voltage measurements can be made at leisure after the detector array has been exposed to the radiation, and it is not necessary to make rapid measurements as is now done. Write: NTIS.

PAT-APPL-6-140 369

High Rate Carbon Cathode, Method of Making, and Electrochemical Cell Including the Cathode/304

Cathode à haute teneur de carbone, technique de fabrication et cellule électro-chimique dotée d'une telle cathode/304

Filed April 14, 1980, by the Department of the Army. A high rate carbon cathode is made by mixing a carbon powder having a surface area of about 1000 square meters/gram with polytetrafluoroethylene and a sufficient amount of

water to form a coherent mixture. The mixture is applied to an electrically conductive screen; the cathode formed while wet to an intermediate thickness, the cathode vacuum dried at about 100 degrees C, and the cathode cold compressed to obtain a final electrode porosity of greater than 80 percent. The cathode can be used in a lithium primary cell using a solution of an inorganic lithium salt in sulfuryl chloride as the electrolyte. Write: NTIS.

PAT-APPL-6-145 934

Method of Treating Sm2Co17-Based Permanent Magnet Alloys/304

Méthode de traitement des alliages d'aimant permanent à base de Sm2Co17/304

Filed May 12, 1980, by the Department of the Army. The reversible temperature coefficient of magnetization of a permanent magnet alloy over the temperature range from -50 degrees C to + 150 degrees C is lowered by heat treating the alloy in a noble gas atmosphere or in a vacuum by the steps of (a) heating the alloy at about 1150 degrees C for 1.5 hours (b) quenching the alloy in ice water, (c) heating the alloy at about 940 degrees C for 2 hours, (d) lowering the temperature to about 700 degrees C and heating for one hour, (e) lowering the temperature to about 600 degrees C and heating for one hour, (f) lowering the temperature to about 500 degrees C and heating for 2 hours, and (g) lowering the temperature to about 400 degrees C and heating for 10 hours. Write: NTIS.

PAT-APPL-6-148 112

Multipath Discriminating Antenna System/304

Système d'antenne permettant d'atténuer les signaux réfléchis non désirés/304

Filed May 9, 1980, by the Department of the Army. To reduce guidance errors in a microwave landing system from false signals reflected by objects along runways, the transmitting antenna radiates an elliptically polarized beam. At the airborne receiver an antenna, such as a pyramidal horn, maintains the separation of the horizontal and vertical components. These components are separated and then split on an equal power basis. One part of the vertical field component is shifted by 90 degrees and added to one part of the horizontal component in a detector, whose output is in effect like that of a circularly polarized receiver. The other parts of the horizontal and vertical components are separately detected. The outputs of the three detectors are combined in a multiplier, to yield a resultant output. For a very broad angular distribution the undesired reflected signals are strongly attenuated. Write: NTIS.

PAT-APPL-6-148 114

Method of Sweeping Quartz/304

Méthode de balayage d'un quartz/304

Filed May 9, 1980, by the Department of the Army. This invention relates to an external source of electromagnetic energy which is applied to quartz in addition to the conventional heating and DC bias electric field. The source can be either coherent or incoherent. The wavelengths can range from the infrared through the visible into the ultraviolet. Write: NTIS.

PAT-APPL-6-148 324

Pulse Train Generator of Predetermined Pulse Rate Using Feedback Shift Register/304

Générateur de trains d'impulsions de débit prédéterminé utilisant un registre à décalage à retour d'information/304

Filed May 9, 1980, by the Department of the Army. This invention concerns a pulse train generator comprising a shift register with feedback for producing an output pulse for every m clock pulses applied to the shift register stages. The feedback shift register normally has a maximal length 2 to the n power -1, where n is the number of stages. Clock pulses are applied to the shift register until an all-ONE condition is reached; thereupon, (m-1) additional clock pulses are applied and the states of the register stages can then be sensed. Appropriate gate circuits are added to the shift register, depending upon the sensed register states, to inhibit certain shifts and to insure that the register is returned to the all-ONE condition upon arrival of every mth cloth pulse. Write: NTIS.

PAT-APPL-6-152 261

Method of Delineating a Desired Integrated Circuit Pattern Upon a Circuit Substrate/304

Méthode de traçage d'un dessin désiré sur un substrat de circuit intégré/304

Filed May 22, 1980, by the Department of the Army. The general object of this invention is to provide a method of delineating a desired integrated circuit pattern upon a circuit substrate. A more specific object of the invention is to provide such a method in which the resist sensitivity is improved without a sacrifice in resolution. Write: NTIS.

PAT-APPL-6-152 287

Method of Selectively Etching a Semiconductor Substrate/304

Méthode de gravure sélective d'un substrat de semiconducteur/304

Filed May 22, 1980, by the Department of the Army. The general object of this invention is to provide a method of selectively etching a semiconductor substrate. A further object is to provide such a method in which the resistance of photoresist masking films to semiconductor etchants is increased so that deep etching can take place either through long exposure periods or through the use of vigorous etchants. Write: NTIS.

PAT-APPL-6-152 920

Shaft-Component Connection Means/304

Raccord arbre-pièce diverse/304

Filed May 23, 1980, by the Department of the Army. This invention relates to a connection between a shaft and a component such as a gear, fan impeller, crank arm, etc, wherein the shaft is provided with axially spaced abutments to sandwich the component against axial displacement along the shaft surface. At least one of the shaft abutments is acutely angled to the shaft axis so that the abutments cooperatively form a wedge-containment system; the component material between the spaced abutments is wedged against rotation around the shaft. Write: NTIS.

PAT-APPL-6-155 334

Improved Dual-Chambered High Pressure Furnace/304

Chaudière haute pression à deux foyers/304

Filed June 2, 1980, by the Department of the Army. The high pressure furnace comprises a cylindrical pressure vessel with front and rear pressure closures. An electrical heating element is supported within the interior of the pressure furnace. The front closure supports a relatively thin-walled inner container opening only to an aperture in the front closure. A small closure plugs the aperture. A reaction frame secures the various closures. Blanket gases are introduced into the furnace chamber and process gases into the process chamber defined by the interior of the inner container. Means are provided for minimizing the pressure difference across the inner container to enable it to maintain its original shape. Write: NTIS.

PAT-APPL-6-155 340

Mechanism for Removing Dust Particles from an Engine Air Cleaner/304

Mécanisme de dépoussiérage des filtres à air de moteurs/304

Filed June 2, 1980, by the Department of the Army. This invention relates to a reversed air system for periodically cleaning one or more filter panels of an engine air cleaner. The cleaner system includes an air nozzle at one face of the filter panel and an air receiver at the other panel face. The nozzle and receiver are arranged on ball screws for transverse movement across the filter panel faces. Under our invention, the air receiver has flexible connections with ball nuts that travel along the associated ball screws. The flexible connections have swing flexibility in different planes to alleviate potential jamming tendencies due to manufacturing tolerances, installation variances, and ball screw sag due to the unsupported length of each screw. Write: NTIS.

PAT-APPL-6-155 341

Articulation Joint Roll Stabilizer/304

Stabilisateur de raccord articulé/304

Filed June 22, 1980, by the Department of the Army. This invention relates to improvement of an articulated vehicle, wherein the trailer has roll motion capability relative to the tractor. This improvement is directed to a hydraulic cylinder mechanism for selectively locking out the roll mode capability when it is intended to operate the vehicle on smooth terrain. Write: NTIS.

PAT-APPL-6-158 008

The Log-Log Scale Lens/304

Lentille logarithmique/304

Filed June 9, 1980, by the Department of the Army. A unique shape is mathematically prescribed for a 'lens' which refracts collimated light passing through it in such a way that any linear scale modulating the incident light is distorted into a logarithmic scale at the final image plane. Write: NTIS.

PAT-APPL-6-159 407

Inverter Circuit with Current Equalization/304

Circuit inverseur à égalisation de courant/304

Filed June 13, 1980, by the Department of the Army. The unbalance in currents flowing alternately in the two halves of a double-ended, push-pull inverter is obviated by means of a parallel resonant network, comprised of an inductor and capacitor, placed in series with the power supply voltage applied to the center tap of the inverter transformer primary winding. The network component values are selected to provide relatively a high impedance at the inverter fundamental operating frequency while providing a low impedance at twice the fundamental operating frequency. Write: NTIS.

PAT-APPL-6-159 539

Radar Target Angle Measuring System/304

Système de mesure de l'angle des cibles radar/304

Filed June 16, 1980, by the Department of the Army. This application relates to a radar system for improving the accuracy of measurement of the angle of a target of the type which includes antenna beam switching means for transmission and reception of radar pulses over either one or the other of two directional beams of electromagnetic energy, each angularly displaced with respect to one another and overlapping one another within the expected target direction. A series of switching pulses occurring at the same repetition rate as the transmitted rf pulses and during the interval between successive ones of said transmitted rf pulse is applied to the antenna beam switching means in such a manner that the antenna beam direction is shifted back and forth for each successive ones of said switching pulses. The transmitted rf pulses may be phase modulated by a code. Write: NTIS.

PAT-APPL-6-160 349

False Count Correction in Feedback Shift Registers and Pulse Generators Using Feedback Shift Registers/304

Correction de compte erroné dans les registres à décalage à retour d'information et dans les générateurs d'impulsions utilisant ce genre de registre/304

Filed June 17, 1980, by the Department of the Army. A pulse train generator is described which includes a shift register with feedback for producing an output pulse for every m clock pulses applied to the shift register stages. The feedback shift register normally has a maximal length -2 to the n power -1, where n is the number of stages. Clock pulses are applied to the shift register until an all-ONE condition is reached; thereupon, (m-1) additional clock pulses, where m can be less than n, are applied and the states of the register stages can then be sensed. Appropriate gate circuits are added to the shift register, including an n-input inverting AND gate, depending upon the sensed register states, to inhibit certain shifts and to insure that the register is returned to the all-ONE condition upon arrival of every mth clock pulse. The pulse generator referred to above provides means for obtaining an output pulse for every m bits of the code length. Write: NTIS.

PAT-APPL-6-162 333

High Power Laser Irradiance Display Material/304

Matériau de visualisation de rayonnements laser grande puissance/304

Filed June 23, 1980, by the Department of the Army. A device for the passive location of irradiance display of high power infrared beams at remote locations utilizing the combination of reflecting material with high thermal conductivity and an absorbing refractory material with high emissivity in the visible portion of the electromagnetic spectrum. Write: NTIS.

PAT-APPL-6-165 924

Uranium-Excimer Nuclear Reactor Laser/304

Laser à réacteur nucléaire à excimères d'uranium/304

Filed July 3, 1980, by the Department of the Army. A Uranium-Excimer Nuclear Reactor Laser comprises of a gaseous mixture of uranium plus another metal to form excimers in the mixture. The laser cavity is so constructed that the resulting concentration of uranium forms a gas core critical reactor. When the cavity is made critical, and fission occurs in the uranium-metal mixture, the fission fragment energy is stored in the gases in the form of excimer state energy, which in turn is converted into laser photon energy. The device converts nuclear fission energy into laser energy in a direct and simple manner. Write: NTIS.

PAT-APPL-6-166 720

Crane Assembly/304

Grue/304

Filed July 7, 1980, by the Department of the Army. The device features the elimination of bending moments in all members to allow a design of minimal weight, and depends on the use of an existing structure to provide stabilizing reactions when erected. A rigid mast is pivoted at its lower end on the existing structure, and supports a block and tackle at its upper end. A rigid triangular spreader and cable assemblies support the mast. Write: NTIS.

PAT-APPL-6-166 872

Pulsed Laser Beam Intensity Monitor/304

Contrôleur d'intensité des faisceaux laser à impulsions/304

Filed July 7, 1980, by the Department of the Army. A pulsed laser beam intensity monitor measures the peak power within a selectable cross section of a test laser beam and measures integrated energy of the beam during the pulse period of a test laser. A continuous wave laser and a pulsed ruby laser are coaxially arranged for simultaneously transmitting optical output energy through a crystal flat during the time a test laser pulse is transmitted through the flat. Due to stress birefringence in the crystal, the ruby laser pulse transmitted through the flat is recorded and analysed to provide peak power information about the test laser output pulse, and the continuous wave laser output reflected from the crystal flat provides a measurement of energy during the test laser pulse. Write: NTIS.

PAT-APPL-6-169 590

Method of Fabricating a Ducted Blanket for a Rotor Spar/304

Méthode de fabrication d'un revêtement alvéolaire pour pale de rotor d'hélicoptère/304

Filed July 17, 1980, by the Department of the Army. A method for fabricating an impervious fiberglass blanket having a plurality of spaced-apart slots on its inner side, such as for overlaying and venting a pressurized helicopter rotor spar, includes the steps of positioning a thin metal forming grid of spaced-apart strips, corresponding to the desired slots, on a forming table over a sacrificial layer of peelable material. Sheets of resin-impregnated fiberglass material are positioned over the grid, another sacrificial layer is applied, and a flat caul plate is placed over the lay-up. The laid-up assembly is placed in a vacuum bag, the bag is evacuated, and the assembly is cured in an autoclave. Write: NTIS.

PAT-APPL-6-170 330

High Energy Laser Target Board/304

Cible pour faisceaux laser à haute énergie/304

Filed July 21, 1980, by the Department of the Army. The target board has an array of discs calorimeters spread around the surface to receive the laser energy. The energy striking a disc is sensed by a pair of thermal leads connected to the back side of the disc and the voltage cross the lead is amplified and sent to a recording system. Write: NTIS.

PAT-APPL-6-170 387

Variable Pressure Fuel Injection System/304

Système d'injection de carburant à pression variable/304

Filed July 21, 1980, by the Department of the Army. This invention relates to a fuel injection system wherein the fuel pressure can be varied or adjusted in accordance with different engine loading conditions. The system includes an accumulator and a source of high-pressure gas for raising the accumulator pressure in accordance with step increases in the fuel pressure. A pressure-operated piston valve is provided to communicate the accumulator with the gas pressure source or with an atmospheric vent, as necessary to raise or lower the accumulator pressure. Write: NTIS.

PAT-APPL-6-170 465

Method of Recharging Fire Extinguisher Bottles/304

Méthode de recharge des extincteurs portatifs/304

Filed July 21, 1980, by the Department of the Army. This invention relates to a method of recharging fire extinguisher bottles wherein special transfer cylinders are used to store and discharge predetermined quantities of liquid fire suppressant and pressurizing gas to the bottle. The process is carried out on a weight basis to minimize errors that would occur if the charging process were carried out on a pressure or volume basis. The invention is particularly applicable to the recharging of fire extinguisher bottles located in military vehicles without the necessity for first removing the bottles from the vehicles. Write: NTIS.

PAT-APPL-6-171 872

Energy Management Damper/304

Amortisseur à soupapes thermosensibles/304

Filed July 24, 1980, by the Department of the Army. A conventional shock absorber is modified by adding a valve cage to the rod end and providing an additional cylinder outside the shock absorber to form an annular reservoir outside the shock absorber. Temperature sensitive valves open when oil heats to a potentially destructive level, unloading the shock absorber. When the oil cools to a safe operating temperature, the temperature sensitive valves reclose and the shock absorber is again operative. Write: NTIS.

PAT-APPL-6-172 360

Sonic Transducer/304

Transducteur sonique/304

Filed July 25, 1980, by the Department of the Army. A sonic transducer device for vibrating windows and glass partitions in the human ear sensitivity range to prevent the capture of conversation by placing an interfering vibration on the windows or glass partitions. Write: NTIS.

PAT-APPL-6-172 803

Improved Hollow Beam Electron Source/304

Source d'électrons à faisceau creux améliorée/304

Filed July 28, 1980, by the Department of the Army. A cold field emitter is placed in special relationship to an anode device having a hole in it close to the emitter. A second electrode can be located above the hole in the anode and be a circular shape of lesser diameter than the first anode so as to shape the hollow beam being emitted by the device. Write: NTIS.

PAT-APPL-6-174 293

Satellite Communication System/304

Système de télécommunications par satellite/304

Filed July 31, 1980, by the Department of the Army. The system of the invention uses a loop-around transmission between a master ground terminal and each slaved ground terminal with the phase or timing being controlled at the master station. The doppler cancelling loop translates a doppler-free primary standard clock to each slave ground terminal. Each slave terminal then uses the received doppler-free timing clock as its standard in a doppler cancelling loop-around timing system to control the frequency of its transmitted signal. The doppler frequency variation at each ground terminal is thereby eliminated for all the slave satellite ground terminals (nodes) accessing the satellite, and a synchronous network for all ground and space trunk transmission is provided without the need for an expensive primary or secondary time standard at all of the several ground terminals. The message traffic channels sent over the satellite link all are received completely free of any doppler frequency variations, thus eliminating the need for any of the large buffers normally required at the satellite ground terminals. Write: NTIS.

PAT-APPL-6-177 032

Means and Method for Testing Laser Range Finders/304

Appareil et méthode d'essai de télémètres à rayon laser/304

Filed August 11, 1980, by the Department of the Army. The present invention relates to an apparatus and a method for using one laser range finder to calibrate another similar range finder. The range finder under test receives a simulated return pulse from the transmitter of the second range finder. An external trigger initiates the transmitter of the range finds under test and a short time later initiates the transmitter of the second range finder. The transmitted beam of the second range finder is directed into the receiver of the range finder under test and it halts the range readout thereof. This range readout is compared to the reading on an external timer arranged to measure the time interval between the emission of the transmitted beams of the two range finders. Write: NTIS.

PAT-APPL-6-179 309

High Power Attenuator and Termination/304

Atténuateur et terminaison à haute puissance/304

Filed August 18, 1980, by the Department of the Army. An attenuator and termination having a relatively flat frequency response for attenuating and dissipating electrical energy is comprised of a plurality of cascaded tee attenuator sections formed on a substantially flat surface ceramic substrate comprised of alumina, for example. The attenuator sections are configured from a single thin film series resistor comprised of gold and a plurality of shunt resistors formed from a layer of cermet which underlies the gold film resistor. The cermet shunt resistors extend away from the series resistor to the side edge of the substrate where they terminate in a ground contact configuration which wraps around the side and lower surface of the substrate. Write: NTIS.

PAT-APPL-6-181 038

Instant Start Thyratron/304

Thyratron à démarrage instantané/304

Filed August 25, 1980, by the Department of the Army. An instant starting hydrogen thyratron is described which incorporates a helical cathode requiring no warm-up time, no stand-by power and no separate heater power supply. The cathode is a self-heating electrode comprised of a low impregnated type cathode having high cold pulse-emission capability. At cold start, the cathode provides sufficient emission capability to trigger readily and to attain full operating temperature via plasma heating effects and its own resistive dissipation. After shut-down, the cathode remains active in readiness for the next cold start, a cycle which can be repeated as often as desired. A specific implementation of the helical cathode comprises tungsten impregnated with barium calcium aluminate. Write: NTIS.

PAT-APPL-6-181 317

Fiber Optic, Liquid Crystal Display Electrical Measurement System/304

Système de mesure d'énergie électromagnétique à affichage à cristaux liquides et fibres optiques/304

Filed August 25, 1980, by the Department of the Army. The electromagnetic energy is captured by the antenna and changes the reflectivity of a Liquid Crystal Display (LCD) proportional to the field being measured. The LCD is illuminated by a fiber optic and this light is reflected from LCD proportional to the electromagnetic field. This field propor-

tional light is captured by a fiber optic and transmitted to a photodetector where it is converted to an electrical signal proportional to the electric field. This electrical signal may then be displayed, recorded or processed with other information. Write: NTIS.

PAT-APPL-6-182 917

PUV/NUV Processing Circuit/304

Séparateur d'impulsions ultra-violettes positives et négatives/304

Filed September 2, 1980, by the Department of the Army. This invention relates to an ultraviolet detector circuit which provides opposite poled parallel diodes and resistors in the feedback loop of an amplifier so as to separate positive going pulse outputs from the negative going pulse outputs. Only the negative going pulse outputs are used to control the gain of the amplifier. Write: NTIS.

PAT-APPL-6-183 608

Focus Meter/304

Mesureur de focalisation/304

Filed September 2, 1980, by the Department of the Army. The focus meter is an electronic circuit that is responsive to a video signal input to provide an output signal which indicates the degree of focus on a target. Imaging systems require alignment or focusing of the imaging sensor aimed or directed toward a target. The image sensor is aimed at the target and the degree of focus on the target is caried. As the maximum point of focus is reached a peak signal output results. The input video is coupled to an amplifier. The input signal is then processed through a differentiator to a peak detector. A portion of the signal is coupled from the amplifier to a sync separator circuit which causes a gate signal to be generated to an electronic switch during undesirable portions of the input video signal. This allows the differentiator output to be short-circuited to ground when undesirable signals are present. When the desired video lying between the blanking pulses are present, the differentiated signals are coupled to the detector. The detector measures the peak values. For a typical viewed scene wherein the target being tracked or sensed has reasonable detail, the peak detected value provides an easily measured maximum at the best point of focus. Write: NTIS.

PAT-APPL-6-183 656

Method of Coating Silicon Nitride Bodies/304

Application d'un revêtement sur des substrats de nitrure de silicium/304

Filed September 2, 1980, by the Department of the Army. This invention relates to an improved method for coating porous silicon nitride with silicon using a wetting aid is presented wherein the porous silicon nitride is coated with successive layers of titanium and silicon, by any known technique. Preferably, the silicon is applied in the form of a slurry. The specimen is then dried for several hours to remove residual liquids. In the final step the specimen is placed upon triangular boron nitride knife edges in a boron nitride coated silicon nitride crucible. The crucible is placed within a furnace and the specimen is heated to a temperature which melts the silicon. This results in a uniform coating of silicon upon the silicon nitride. Write: NTIS.

PAT-APPL-6-184 867

Temperature Responsive Control Circuit/304

Circuit de commande de courant en fonction de la température/304

Filed September 8, 1980, by the Department of the Army. The delivery of alternating current from a source to a load, especially a resistance heater, is accurately controlled as a function of temperature through the employment of a bi-directional solid state switch. A full-wave power control for the solid state switch includes a temperature probe comprising one or a combination of voltage and temperature sensitive devices. Write: NTIS.

PAT-APPL-6-080 726

Conversion of Alkali Metal Sulfate to the Carbonate/304

Transformation de sulfate d'alkali en carbonate d'alkali/304

Filed October 1, 1979, by the Department of Energy. A process is described for converting potassium sulfate to potassium carbonate in which a mixture of potassium sulfate and calcium oxide are reacted at a temperature in the range of between about 700 exp 0 C and about 800 exp 0 C with a gaseous mixture having a minor amount of hydrogen and/

or carbon monoxide in a diluent with the calcium oxide being present in an amount not greater than about 20 percent by weight of the potassium sulfate to produce an aqueous mixture of potassium sulfide, potassium bisulfide, potassium hydroxide and calcium sulfide and a gaseous mixture of steam and hydrogen sulfide. The potassium and calcium salts are quenched to produce an aqueous slurry of soluble potassium salts and insoluble calcium salts and a gaseous mixture of steam and hydrogen sulfide. The insoluble calcium salts are then separated from the aqueous solution of soluble potassium salts. The calcium salts are dried to produce calcium sulfide, calcium bisulfide and steam, and then, the calcium sulfide and calcium bisulfide are converted to the oxide and recycled. The soluble potassium salts are carbonated to produce potassium carbonate which is concentrated and the precipitated crystals separated, the sulfur-containing compounds are further treated. This process was developed for desulfurization and reprocessing of spent seed from open-cycle coal-fired MHD generators for reuse. Write: DOE.

PAT-APPL-6-107 741

Porous Electrolyte Retainer for Molten Carbonate Fuel Cell/304

Dispositif poreux de rétention d'électrolyte pour pile à combustible de carbonate fondu/304

Filed December 27, 1979, by the Department of Energy. A porous tile for retaining molten electrolyte within a fuel cell is prepared by sintering particles of lithium aluminate into a stable structure. The tile is assembled between two porous metal plates which serve as electrodes with fuels gases such as H sub 2 and CO opposite to oxidant gases such as O sub 2 and CO sub 2. The tile is prepared with a porosity of 55 to 65% and a pore size distribution selected to permit release of sufficient molten electrolyte to wet but not to flood the adjacent electrodes. Write: DOE.

PAT-APPL-6-107 791

Direct Contact, Binary Fluid Geothermal Boiler/304

Chaudière géothermique double fluide à contact direct/304

Filed December 27, 1979, by the Department of Energy. Energy is extracted from geothermal brines by direct contact with a working fluid such as isobutane which is immiscible with the brine in a geothermal boiler. The geothermal boiler provides a distributor arrangement which efficiently contacts geothermal brine with the isobutane in order to prevent the entrainment of geothermal brine in the isobutane vapor which is directed to a turbine. Accordingly the problem of brine carryover through the turbine causing corrosion and scaling thereof is eliminated. Additionally the heat exchanger includes straightening vanes for preventing startup and other temporary fluctuations in the transitional zone of the boiler from causing brine carryover into the turbine. Also a screen is provided in the heat exchanger to coalesce the working fluid and to assist in defining the location of the transitional zone where the geothermal brine and the isobutane are initially mixed. Write: DOE.

PAT-APPL-6-025 157

Improved Multi-Step Process for the Production of Methanesulfon-m-anisidide, 4'-(9)-acridinylamino)-/304

Méthode améliorée à plusieurs étapes pour la synthèse du 4'-(9-acridinylamino)-méthanesulfone-m-anisidide/304

Filed March 29, 1979, by the Department of Health, Education, and Welfare. The purpose of this invention is to provide a modus for recounting the production of quantities of the compound in preparation for clinical trial for antitumor antileukemic effect and to produce quantities for clinical studies in multiple clinical sites. The invention describes the multi-step process in detail. Write: NTIS.

PAT-APPL-6-115 411

Facile Synthesis of Codeine Precursors from Thebaine/304

Synthèse facile de précurseurs de la codéine à partir de la thébaïne/304

Filed January 25, 1980, by the Department of Health, Education, and Welfare. Thebaine is converted to a mixture of codeinone and neopinone in aqueous formic acid solution containing as catalyst a mercuric salt. Thebaine is converted to a neopinone ketal by irradiation in an alkanol or to a mixture of neopinone and codeinone in an acidic aqueous solution. Neopinone ketals, codeinone and neopinous can be converted to codeine. Write: NTIS.

PAT-APPL-6-133 788

Improved Synthesis of 2,4-Diamino-6-Hydroxymethylpteridine/304

Synthèse améliorée de la 2,4-diamino-6-hydroxyméthylptéridine/304

Filed March 25, 1980, by the Department of Health, Education, and Welfare. In a method of preparing methotrexate from a coupling of 2,4-bis(triphenylphosphazino)-6-bromomethyl-pteridine hydrobromide with ethyl N-(p-methylamino)-benzoyl-L-glutamate to produce the phosphazino derivative of methotrexate ester and subsequently hydrolyzing the phosphazino and ester groups to produce the free methotrexate. Write: NTIS.

PAT-APPL-6-143 129

Separation of Triphenylphosphine Oxide from Methotrexate Ester and Purification of Said Ester/304

Séparation de l'oxyde de triphénylphosphine du méthotrexate et purification de cet ester/304

Filed April 23, 1980, by the Department of Health, Education, and Welfare. The present invention is concerned with two process improvement which may be applied to the basic Ellard patent, 4,080,325, which dealt with the coupling of diethyl-N-(4-(methylamino)benzoyl)-L-glutamate with a 6-bromomethyl-2,4-diaminopteridine derivative to form diethyl methotrexate. This latter compound, upon hydrolysis of the ethyl ester groups, releases the free compound, methotrexate. Write: NTIS.

PAT-APPL-6-150 320

Inactivation on Non-A, Non-B Hepatitis Agent/304

Inactivation des agents infectieux de l'hépatite de type autre que A et B/304

Filed May 16, 1980, by the Department of Health and Human Services. This invention relates to a method of inactivating a non-A, non-B hepatitis agent by means of formalin utilized in extended treatment. The range of formalin treatment utilizes a concentration of 1:1,000 - 1:10,000, preferred 1:1,000, and the duration of treatment is from 24-120 hours at any temperature with a preferred 96 hours (4 days) at 37 plus or minus 4C. This formalin-treated or otherwise inactivated agent, or portions of the agent, may be later used to produce a vaccine against non-A, non-B hepatitis. Write: NTIS.

PAT-APPL-6-157 380

Blood Gas Analyzer System/304

Analyseur des gaz sanguins/304

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed June 9, 1980, by the Department of Health and Human Services. This invention relates to blood gas monitoring systems, and more particularly to a system for monitoring blood gases and maintaining oxygen delivery to a patient during open-heart surgery and other extracorporeal blood flow situations. Write: NTIS.

PAT-APPL-6-163 952

Intracranial Pressure Monitoring Device/304

Appareil de mesure en continu de la pression intra-crânienne/304

Filed June 30, 1980, by the Department of Health and Human Services. This invention relates to patient monitoring instruments, and more particularly to an instrument for intracranial pressure monitoring of post-operative neurosurgical patients. Write: NTIS.

PAT-APPL-6-170 570

Water Soluble Forms of Retinoids/304

Formes hydrosolubles de résinoïdes/304

Filed July 21, 1980, by the Department of Health and Human Services. This invention relates to water soluble Retinoid complexes and a method for their preparation. Write: NTIS.

PAT-APPL-6-174 239

Electric Gel Slicer/304

Machine à couper les matériaux gélatineux/304

Filed July 31, 1980, by the Department of Health and Human Services. This invention relates to material slicing machines, and more particularly to apparatus for cutting uniform slices of gel material. Write: NTIS.

PAT-APPL-6-181 465

Nondenaturing Zwitterionic Detergents for Membrane Biochemistry/304

Détergents ampholytiques non-dénaturants destinés à être utilisés en biochimie des membranes/304

Filed August 26, 1980, by the Department of Health and Human Services. A nondenaturing zwitterionic detergent for proteins which, for example, consists of an effective amount of 3-((3-cholamidopropyl)dimethylammonio)-1-propanesulfonate (CHAPS). This detergent is of extreme interest in the biological study of proteins due to its nondenaturing characteristic. Write: NTIS.

PAT-APPL-6-186 381

Contrast Resolution Tissue-Equivalent Ultrasound Test Object/304

Objet d'essai, équivalent à des tissus, pour la résolution du contraste en diagnostic ultrasonore/304

Filed September 11, 1980, by the Department of Health and Human Services. The present invention relates to a calibration phantom or test object for simulating animal or human cell tissue which can calibrate, or test diagnostic ultrasound scanners. Write: NTIS.

PAT-APPL-6-195 188

Mask for the Safe Delivery of Inhalation Gases to Small Laboratory Animals/304

Inhalateur pour l'administration sûre de gaz à des animaux de laboratoire/304

Filed October 8, 1980, by the Department of Health and Human Services. The present invention relates to masks for delivering inhalation gases to small laboratory animals and, more particularly, to such masks which are suitable for the delivery of volatile anesthetic gases without danger to the animal or to personnel in the area. Write: NTIS.

PAT-APPL-6-134 855

Toroidal Cell and Battery/304

Pile torique/304

Filed March 28, 1980, by NASA. A toroidal cell is disclosed which includes a wound core disposed within a pair of toroidal channel shaped electrodes separated by nylon insulator. The shape of the case electrodes of this cell allows one doughnut shaped surface and the inner cylindrical case wall to be used as an electrode and a second planar doughnut shaped surface and the outer cylindrical case wall to be used as another electrode. Connectors may be used to stack two or more toroidal cells together by connecting the entire surface area of the electrode of one cell to the entire surface area of the electrode of a second cell. The central cavity of each toroidal cell may be used as a conduit for pumping a fluid through the toroidal cell to thereby cool the cell. Write: NASA, Lewis Research Center, 21000 Brookpark Road, Cleveland, Ohio 44135 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113, U.S.A.

PAT-APPL-6-175 453

Improved Low-Drag Ground Vehicle Particularly Suited for Use in Safely Transporting Livestock/304

Véhicule terrestre à faible traînée, adapté au transport du bétail/304

Filed August 5, 1980, by NASA. A low drag truck consisting of a tractor trailer rig characterized by a rounded forebody and a protective fairing for the gap conventionally found to exist between the tractor and the trailer is described. The truck is particularly suited for establishing an attached flow of ambient air along the vehicle surfaces by utilizing a forward facing, ram air inlet and duct and a plurality of submerged inlets and outflow ports which communicate with

the trailer for continuously flushing heated gasses from the trailer as the rig is propelled at highway speeds. Write: NASA, Hugh L. Dryden Flight Research Center, Edwards, California 93523 and send a copy of your original correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-185 869

Multiple Pure Tone Elimination Strut Assembly/304

Capot antibruit (élimination des sons purs)/304

Filed September 11, 1980, by NASA. An acoustic noise elimination assembly is described which has a capability for disrupting the continuity of fields of sound pressures forwardly projected from fans or rotors of a type commonly found in the fan or compressor first stage for airbreathing engines when operating at top speeds in the supersonic range. The assembly includes a tubular cowl defining a duct for delivering an airstream axially into the intake for a jet engine and a sound barrier defined by a plurality of intersecting flat plates or struts, having a line of intersection coincident with a longitudinal axis of the tubular cowl which serves to disrupt the continuity of rotating fields of multiple pure tonal components of noise. Write: NASA, Hugh L. Dryden Flight Research Center, Edwards, California 93523 and send a copy of your original correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-168 995

Electrical Self-Aligning Connector/304

Connecteur électrique à auto-alignement/304

Filed July 15, 1980, by NASA. A self aligning electrical connector device including a receptacle component having a conically contoured interior and a plug component having a correspondingly contoured conical body receivable in the receptacle component is disclosed. The plug component includes a plurality of spaced conductive ring elements having a mating face and the receptacle component includes a plurality of corresponding spaced conductive ring elements providing mating interface with the mating face of the ring elements of the plug component when connected therewith. Each ring element of the receptacle component includes a plurality of segmented portions which defect downwardly when the plug component is inserted therein to assert a biasing force against the face of the ring elements of the plug component providing positive electrical contact and connection between the ring elements of the components. Write: NASA, Marshall Space Flight Center, Mail Code: CC01, Huntsville, Alabama 35812 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

PAT-APPL-6-171 933

Liquid Immersion Apparatus for Minute Articles/304

Appareil d'immersion de menus articles/304

Filed July 18, 1980, by NASA. An apparatus for immersing minute articles such as integrated circuit chip in an etching solution during manufacture of the chips is described. The apparatus includes a basket having minute fluid passages in its sides and bottom, the passages being dimensioned to overcome buoyancy while allowing complete circulation. The basket has a removable lid member also having fluid passages to prevent air pockets and facilitate circulation. Both the basket and lid member are constructed of corrosion resistant material such as Teflon and are dimensional to provide a friction bit. A holder member including handle portion and support mean is disposed to support and retain the basket while in the solution. The overall combination of the basket, lid, and handle having the features referred to above enable treatment of the chips and avoidance of losses and unnecessary handling. Write: NASA, Marshall Space Flight Center, Mail code: CC01, Huntsville, Alabama 35812 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

PAT-APPL-6-187 106

Collimated Beam Manifold and Method for Using the Same/304

Diviseur optique de faisceau collimaté et méthode d'utilisation/304

Filed September 15, 1980, by NASA. An optical manifold transforms a collimated beam, such as a laser beam, into a number of parallel beams having uniform intensity or having a desired intensity ratio. The manifold comprises an optical substrate coated on its rear surface with a fully reflective layer and on its front surface with a partially reflecting layer with a reflectivity gradient. An input collimated beam entering the rear surface and impinging on the front surface is multiplicatively reflected between the front and rear surfaces producing a number of parallel beams

that emerge from the front surface. The intensities of the emerging beams have a relationship that depends on the reflectivity (R1, R2, R3, R4, and R5) of the front surface at the points where the beams emerge. By properly selecting the reflectivity gradients, the emerging beams will have uniform intensity or a desired intensity ratio. Write: NASA, Marshall Space Flight Center, Mail Code: CC01, Huntsville, Alabama 35812 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

PAT-APPL-6-175 452

Phosphorus-Containing Bisimide Resins/304

Résines bisimides contenant du phosphore/304

Filed August 5, 1980, by NASA. Fire resistant resins particularly useful for making laminates with inorganic fibers such as graphite fibers are made by condensation of an ethylenically unsaturated cyclic anhydride with bis (diaminophenyl) phosphine oxide, and by addition polymerization of the bisimide so obtained. Up to about 50%, on a molar basis, of benzophenonetetracarboxylic acid anhydride can be substituted for some of the cyclic anhydride to alter the properties of the products. Graphite cloth laminates made with these resins have shown 800 C char yields greater than 70% by weight in nitrogen. Limiting oxygen indexes of more than 10% were determined for these resins. Write: NASA, Ames Research Center, Mail Code: 200-11A, Moffett Field, California 94035 and send a copy of your initial correspondence to Canadian Consulate General, One Maritime Plaza, Alcoa Building, Suite 1100, Golden Gateway Center, San Francisco, California 94111, U.S.A.

PAT-APPL-6-185 865

Pocket Ecg Electrode/304

Electrode en forme de poche pour électrocardiogrammes/304

Filed September 11, 1980, by NASA. A low noise electrode suited for sensing electrocardiograms when chronically and subcutaneously implanted in a free ranging subject is described. The electrode comprises a pocket shaped electrically conductive member with a single entrance adapted to receive body fluids. The exterior of the member and the entrance region is coated with electrical insulation so that the only electrolyte/electrode interface is within the member, remote from artifact-generating tissue. Cloth straps are bonded to the member to permit the electrode to be sutured to tissue and to provide electrical lead flexure relief. Write: NASA, Ames Research Center, Mail Code: 200-11A, Moffett Field, California 94035 and send a copy of your initial correspondence to Canadian Consulate General, One Maritime Plaza, Alcoa Building, Suite 1100, Golden Gateway Center, San Francisco, California 94111, U.S.A.

PAT-APPL-6-165 910

Multibeam Single Frequency Synthetic Aperture Radar Processor for Imaging Separate Range Swaths/304

Processeur de radar à ouverture synthétique, à faisceaux multiples et à fréquence unique pour la formation d'images de balayages séparés/304

Price per copy from NTIS: PC U.S. $3.50/MF U.S. $3.50, filed July 3, 1980, by NASA. A single-frequency multibeam synthetic aperture radar for large swath imaging is disclosed. Each beam illuminates a separate 'footprint' (i.e., range and azimuth interval). The distinct azimuth intervals for the separate beams produce a distinct Doppler frequency spectrum for each beam. After range correlation of raw data, an optical processor develops image data for the different beams by spatially separating the beams to place each beam of different Doppler frequency spectrum in a different location in the frequency plane as well as the imaging plane of the optical processor. Selection of a beam for imaging is made in the frequency plane by adjusting the position of an aperture, or in the image plane by adjusting the position of a slit. The raw data is processed in digital form in an analogous manner. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-185 867

Improving the Efficiency of Silicon Solar Cells Containing Chromium/304

Amélioration du rendement des piles solaires au silicium contenant du chrome/304

Filed September 11, 1980, by NASA. Efficiency of silicon solar cells containing about 10 to the 15th power atoms/cu cm of chromium is improved about 26% by thermal annealing of the silicon wafer at a temperature of 200 C to

form chromium precipitates having a diameter of less than 1 Angstrom. Further improvement in efficiency is achieved by scribing laser lines onto the back surface of the wafer at a spacing of at least 0.5 mm and at a depth of less than 13 micrometers to preferentially precipitate chromium near the back surface and away from the junction region of the device. This provides an economical way to improve the deleterious effect of chromium, one of the impurities present in metallurgical grade silicon material. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-188 160

A Fiber Optic Transmission Line Stabilization Apparatus and Method/304

Appareil et méthode de stabilisation de ligne de transmission à fibre optique/304

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed September 17, 1980, by NASA. A reference signal of RF frequency modulates .85 micrometer wavelength optical transmitter whose output passes through an optical filter and a voltage controller phase shifter such that the output of the phase shifter is provided to the fiber optic transmission line. At the receiving end of the fiber optic transmission line, the signal is demodulated and used to modulate a 1.06 micrometer optical transmitter. The output signal from 1.06 micrometer optical transmitter is provided to the same fiber optic transmission line and passes through the voltage controlled phase shifter to a phase error detector. The phase of the modulation of the 1.06 micrometer wavelength signal is compared to the phase of the reference signal by the phase error detector which provides a phase control signal related to the phase difference. This control signal is provided to the voltage controlled phase shifter which alters the phase of both optical signals passing through until a predetermined phase relationship between modulation on the 1.06 micrometer signal and the reference signal is obtained. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-191 744

Control Means for a Solid State Crossbar Switch/304

Système de commande de commutateur crossbar à semiconducteurs/304

Filed September 29, 1980, by NASA. A control system for a solid state crossbar switch is described which allows a number of switch control and interrogation functions to be implemented by time sharing related circuity. The crossbar switch includes a number of X ports and Y ports. Each X-Y port intersection designates a specific X-Y intersection latch which controls a number of associated switches for interconnecting one set of data liness associated with the X port to another set of data lines associated with the Y port. The control system continuously and sequentially addresses each of the X-Y intersection latches at a 10 megahertz rate. During this continual and sequential addressing, the control circuitry includes a capability for (1) interrogating each intersection latch for determining which are in a set condition; (2) ensuring that only one X-Y intersection latch is set on an X row and Y column defining that latch; (3) resetting all of the X-Y intersection latches; and (4) determining which of the X-Y intersection latches are in a set condition. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

PAT-APPL-6-155 281

Manchester Code Decoding Apparatus/304

Appareil de décodage de code Manchester/304

Filed July 2, 1980, by the Department of the Navy. An apparatus for decoding a Manchester encoded waveform is described in which a gating circuit responds to the mid-cell transitions in the encoded waveform to produce an enabling signal which causes a clock circuit to generate high frequency clock pulses. A programmable counter accumulates the generated clock pulses. If the counter exceeds a clock count threshold set by a multiposition switch before the beginning of the following enabling signal it causes a storage element to sample the encoded waveform and store the sample to provide an output signal representing decoded data. A second, substantially equivalent circuit decodes timing from the encoded waveform. The multiposition switch provides the apparatus with the capability to decode encoded waveforms of varying frequency. Write: NAVY.

PAT-APPL-6-157 910

An Improved Performance Rotating Heat Pipe/304

Conduite de chaleur rotative de rendement accru/304

Filed June 9, 1980, by the Department of the Navy. An improved performance rotating heat pipe having an internally finned condenser section. The condenser section has a plurality of fins extending the length of the interior in a spiral counter to the pipe rotation. The fins therefore act as a condensate pump, or impellers, to force the condensate back to the evaporator, as well as to increase the surface area for condensation. External radial fins may be incorporated with the condenser section to assist in cooling the condenser section. Write: NAVY.

PAT-APPL-6-170 355

A Thixotropic Restrictor, Curable at Room Temperature, For Use on Solid Propellant Grains/304

Limitateur thixotropique, durcissant à la température ambiante, pour incorporer aux grains de propulseur solide/304

Filed July 21, 1980, by the Department of the Navy. A solid propellant restrictor for preventing erosive burning in solid propellant grain critical areas is described. The restrictor is a mixture of hydroxyl-terminated polybutadiene with 1% by weight of dissolved 2,2'-methylenebis-(4-methyl-6-tertiary-butylphenol), dioctyl adipate, triethanolamine, ferric acetylacetonate, carbon black, aluminum oxide, silicon oxide, and toluene diisocyanate, curing at room temperature and illustrates superior hardening, adhesive, and application properties. Write: NAVY.

PAT-APPL-6-171 860

Coaxial Termination for Cable In-Line Electronic Applications/304

Terminaison coaxiale pour câble électronique/304

Filed July 24, 1980, by the Department of the Navy. A cable terminator assembly for a coaxial cable includes a housing having a braided extension affixed thereto for transferring tensile strength from a cable to the housing and braided extension. An inner cylindrical piece is swaged to the housing for holding the braided extension in place. A dielectric clamp with a closure ring, flat locking washer and cap complete the components within the termination. The washer is keyed to the housing and, together with the housing, clamp the stranded cable conductor. The keying prevents turning of the mating components so that the stranded cable conductor will not be damaged. The clamping of the strands makes electrical contact between the strands and the assembly. The dielectric clamp is forced to bite into the dielectric material of the coaxial cable. This provides a firm mechanical hold. Write: NAVY.

PAT-APPL-6-177 707

Interleaved Sweep Radar Display for Improved Target Detection/304

Indicateur radar à balayage entrelacé assurant une meilleure détection des cibles/304

Filed August 13, 1980, by the Department of the Navy. A system, which interfaces with a radar indicator, for improving signal-to-noise ratio (SNR) and enhancing the detection of moving targets includes an analog-to-digital (A/D) converter, an integrator, a digital memory, a digital-to-analog (D/A) converter, and a synchro-to-digital converter. Radar video is converted to digital signals which are integrated and stored in memory. The angle signal from the antenna pedestal synchro is fed to the synchro-to-digital converter and stored in memory. The contents of the memory is processed, converted to analog form, and fed to the indicator. The radar provides a number M of sweeps within each beamwidth, or angular sector, of the antenna during each antenna scan. Contiguous sets of M sweeps are added to form batches. The signal content for each batch is displayed on the indicator in the angular sector which is identified with the M sweeps. The width of each sector is approximately a beamwidth. Within each sector a number N of batches, which are formed during N successive scans, is displayed on the indicator such that the batch formed during the latest scan appears at the clockwise boundary of a sector and the batch formed during the oldest scan appears at the counterclockwise boundary. The SNR is improved by digitally adding M successive sweeps and displaying the results from N successive scans in a manner whereby signal-plus-noise from one scan is not corrupted by noise from other scans. Write: NAVY.

PAT-APPL-6-180 538

Laser Beam Directional Deviation and Noise Stabilization Device/304

Dispositif de déviation directionnelle d'un faisceau laser et de stabilisation du bruit/304

Filed August 22, 1980, by the Department of the Navy. A laser beam directional deviation and noise stabilization device is disclosed as incorporating a laser which broadcast a monochromatic laser light beam along a predetermined optical path, and a plurality of optical elements which eliminate from the laser light beam any beam wander, and power level fluctuations inherent within the laser light beam. Write: NAVY.

PAT-APPL-6-180 547

Ferrofluid Transducer/304

Transducteur à ferrofluide/304

Filed August 25, 1980, by the Department of the Navy. An underwater sound generator composed of a ferrofluid contained within a toroidal container which has a rigid bottom and top and elastic cylindrical side walls. A coil of wire links the toroidal container and is adapted to be connected to a dc bias source to produce a biasing magnetic field, HBIAS, which drives the magnetization of the ferrofluid well into saturation. Two oppositely wound coils of wire respectively link the inner side wall and the outer side wall and are adapted to be connected in series to an ac signal source to produce a time-varying magnetic field, HAC, which modulates HBIAS. The wires are equally spaced in the volume occupied by the ferrofluid. The gradient of HAC in the radial direction provides the time-varying force on the ferrofluid. The resulting ferrofluid motion in the radial direction is transmitted through the outer elastic side wall to supply acoustic motion to the surrounding water. Write: NAVY.

PAT-APPL-6-180 548

Low Sidelobe Linear FM Chirp System/304

Système de traitement d'impulsions à modulation linéaire de fréquence de radar à faibles lobes latéraux/304

Filed August 25, 1980, by the Department of the Navy. A hybrid pulse compression system for processing the echo from a linear frequency modulated radar pulse comprising: a receiver for receiving an echo and converting it to an I.F. signal; a heterodyning circuit for converting this I.F. signal to I and Q baseband signals; a sample and hold circuit for sampling these I and Q signals at the Nyquist rate; a heterodyning and adding circuit for converting the sampled I and Q signals back to an I.F. signal, a tapped delay line with delays of approximately the inverse of the Nyquist rate between adjacent taps; a plurality of phase-shifting elements, one element located in each tap for shifting the phase of the signal in that tap by a predetermined amount such that when an echo is properly indexed in the delay line, then the outputs from all of the phase-shifting elements will be in-phase; and an adding circuit for adding the phase-shifted outputs from the signal taps such that when these outputs are in-phase, then a short pulse with low sidelobes and a large peak amplitude is obtained. Write: NAVY.

PAT-APPL-6-181 292

Method of Making GeTe Infrared Detector/304

Méthode de fabrication d'un détecteur de rayons infra-rouges à couche de GeTe/304

Filed August 25, 1980, by the Department of the Navy. A method of fabricating a GeTe infrared detector using a photolithographic process. An amorphous film of GeTe is vacuum deposited on a high mass and low thermal conductive substrate. The film of GeTe is covered with a photoresist layer which is developed into a mask. The GeTe is then selectively etched through the photoresist mask using ferric chloride. The photoresist mask is removed and electrical conductors are vacuum deposited on the GeTe film and selectively etched through a photoresist pattern. The conductor can also be deposited on the substrate etched prior to deposition of the GeTe layer. Write: NAVY.

PAT-APPL-6-181 926

Fragment-Tolerant Transmission Line/304

Ligne de transmission à l'épreuve des dommages causés par les fragments de projectiles/304

Filed August 27, 1980, by the Department of the Navy. An improved transmission line or waveguide that can tolerate damage from ordnance fragments without severe degradation of performance. Ordnance fragment penetration into a

waveguide tends to produce jagged inward protrusions or loose metal chips of the type which can cause arc-over and high standing wave ratios. The present invention provides a transmission line or waveguide made of a brittle nonconductive material such as plastic or composite material which is coated on the surfaces bordering the interior volume with a solder, conductive paint, or other conductive materials. Thus, any penetration of the waveguide will leave a clean hole without jagged protrusions which could precipitate arcing and degrade the waveguide VSWR. An alternative embodiment comprises the construction of the waveguide walls from a brittle conductive material which would leave a clean hole after penetration. Write: NAVY.

PAT-APPL-6-185 039

Surface Hardening by Particle Injection Into Laser Melted Surface/304

Durcissement de surfaces par injection de particules dans la couche superficielle amenée en fusion au moyen d'un laser/304

Filed September 8, 1980, by the Department of the Navy. A method of impregnating the surface of a metal substrate with wear resistant particles to impart wear resisting characteristics to the surface. The substrate surface is subjected to a relatively moving high-powered laser beam to cause localized surface melting in passes thereacross, and hard wear resistant particles are forcibly velocity injected into the melt. The particles are captured upon solidification of the melt pool and retained therein by metallurgical bond. A wear resistant layer is formed which is an integral part of the underlying material. Write: NAVY.

PAT-APPL-6-188 419

Solid State Power Transformer/304

Transformateur de puissance à l'état solide/304

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed September 18, 1980, by the Department of the Navy. Apparatus for providing the voltage transformation functions of a conventional electrical power transformer. An AC input signal is chopped in a solid state switching converter at a frequency very much larger than the frequency at the input signal and then filtered to attenuate the high frequency component while passing the frequency of the AC input signal. The switching converter includes a pair of bidirectional solid state switches, an inductor and a capacitor connected in a buck converter, boost converter or buck-boost converter arrangement to provide a step up, step down, or step up/step down capability, respectively. A feedback signal modulates the duty cycle of the switching converter to provide automatic voltage regulation under varying loads and leading and lagging power factors. Write: NAVY.

PAT-APPL-6-189 245

Survey Spar System for Precision Offshore Seafloor Surveys/304

Système de perche pour des levés de précision des fonds marins/304

Filed September 22, 1980, by the Department of the Navy. A stiff, straight spar is allowed to pivot about an anchor on the seafloor. The location of the bottom with respect to the top is then determined by measuring the tilt of the spar and computing the offset of the bottom relative to the top. The straight member uses its internal buoyancy to remain erect and stable while the weight of the anchor keeps it in place on the seafloor. The top of the spar is tracked by shore stations while the tilt and heading of the spar is monitored by an instrumentation system. Simultaneous readings of the shore instruments and the spar's tilt and heading indicators allow direct determination of the anchor location relative to the shore. An air ballast control enables the apparatus to the easily maneuvered on the ocean bottom by divers or on the surface and an internal plumb bob system allows calibration of the overall system. Write: NAVY.

PAT-APPL-6-189 497

Method of Providing Phase Biasing in a Continuous Single-Mode Fiber Ring Interferometer/304

Méthode pour réaliser un déphasage dans un interféromètre à fibre bouclée en mode simple/304

Filed September 22, 1980, by the Department of the Navy. A fiber interferometer gyro employing a continuous, integral looped single-mode fiber is coupled to bidirectionally transmit clockwise and counterclockwise pulsed beams of light through a coiled continuous integral single-mode fiber from a laser to a pair of detectors. A suitably polarized piezoelectric cylinder is fitted about a portion of the continuous integral single-mode fiber to change the refractive index of that portion of the continuous integral single-mode fiber when appropriate electric fields are impressed across it. Changing the retractive index in only that portion of the continuous integral single-mode fiber results a

selective phase biasing between the clockwise and counterclockwise traveling pulsed beams so that a rotation displacement of the interferometer gyro is more easily detected. This enhanced capability does not compromise the interferometer's effectiveness since its integral, continuous path is not broken nor are other elements introduced in the light pathway provided by the continuous single-mode fiber. Write: NAVY.

PAT-APPL-6-190 298

Optical Fiber Waveguide for Measuring Magnetic Fields/304

Fibre optique guide d'ondes pour mesurer les champs magnétiques/304

Filed September 24, 1980, by the Department of the Navy. This document discloses an optical fiber waveguide for detecting magnetic fields. The optical fiber waveguide includes therein an array of discrete elongate magnetized particles, all polarized in the same direction with their axes generally parallel with the longitudinal axis of the waveguide, which in the presence of a time-varying magnetic field are subjected to magnetostrictive effects and undergo linear dimension changes to cause a related longitudinal dimension change of the optical fiber waveguide whereby a laser beam passing longitudinally through the waveguide is subject to phase shifts detectable by interferometry. Write: NAVY.

PAT-APPL-6-191 563

Fused Single-Mode Fiber Bidirectional Coupler/304

Coupleur directif à fibres à mode unique soudées/304

Filed September 29, 1980, by the Department of the Navy. An improvement for the coupling of optical energy in a single-mode fiber assures a stable bidirectional coupling. A method of fabricating a single-mode evanescent field coupler for optical data between two single-mode fibers requires an etching away of a substantial portion of the claddings about the cores of both single-mode fibers. This etching calls for the immersion of sections of fibers in an etching solution for a predetermined time with the ends of the exposed sections being carefully masked to create smooth, unscored, tapered transitions. The etched sections of the single-mode fibers are placed in a side-by-side relationship, are longitudinally twisted about each other to assume a closely abutting helical disposition and are secured in place at their ends. A pair of tungsten electrodes are brought in the close proximity of the twisted etched fibers and an arc is initiated. Moving the electrodes along the length of the twisted etched fibers causes the arc to fuse them together to assure a stable configuration and hence stable evanescent field coupling. Once the fibers have been fused, a protective envelope encases the fused twisted fibers and it is filled with a liquid having the same index of refraction as the fibers' claddings. Thus, a stable coupler is created that is isolated from outside thermal and mechanical influences. Write: NAVY.

PAT-APPL-6-192 962

Dispersion Compensated Acoustic Surface Waveguides Using Diffused Substrates/304

Guides d'ondes acoustiques de surface à dispersion compensée par l'emploi de substrats diffusés/304

Filed October 2, 1980, by the Department of the Navy. This document discloses a surface acoustical wave (SAW) waveguide device which compensates for dispersion by utilizing diffused substrates. Various embodiments have in-diffused or out-diffused core regions in which the ray is channeled that are topped by a thin metallic film overlay. Partially surrounding each core region are cladding portions which are also selectively in-diffused or out-diffused and may be covered by the metal overlay. By varying the amounts of in-diffusion or out-diffusion for the particular application, the effects of dispersion are minimized. Write: NAVY.

PAT-APPL-6-193 864

Flexible Semiconductive Polymers/304

Polymères semiconducteurs souples/304

Filed October 3, 1980, by the Department of the Navy. An electrically conductive polymeric composition is fabricated by dispersing polymeric ether complexes of tetracyano quinidimethane (TCNQ) salts within a flexible, thermoplastic polymer matrix. The compositions form flexible, homogeneous, films which exhibit substantially superior properties over currently available TCNQ salt based systems. Write: NAVY.

PAT-APPL-6-194 166

A Two-Stage Spatial Frequency Filter/304

Filtre de fréquences spatiales à deux étages/304

Filed October 6, 1980, by the Department of the Navy. A two stage spatial filter, for use with a transparency of an object framed by a rectangular field stop, for separating the spectrum of the Fourier transform of the object from the superposed spectrum of the Fourier transform of the rectangular field stop. The transparency is disposed in an object lane of a focusing lens and illuminated by a beam of coherent light. The first stage of the spatial filter is a high pass filter in the form of an opaque cross adapted to be disposed in the Fourier transform plane of the lens to block the lower spatial frequency components of the Fourier transform of the rectangular field stop. The second stage of the spatial filter is a low-pass filter in the form of an opaque screen having a rectangular aperture and adapted to be disposed in the image plane of the lens conjugate to the object plane for blocking the detail in the real image of the transparency coming from the unfiltered higher spatial frequency components of the Fourier transform of the rectangular field stop. A second focusing lens behind the low-pass filter reimages the Fourier transform of the transparency after filtering. Write: NAVY.

Licensing Opportunities Through Control Data Worldtech, Inc., U.S.

The following technologies are offered for manufacture under license in Canada. When requesting additional information, please quote the reference number. Write: Control Data Worldtech, Inc., 474 Concordia Avenue, St. Paul, Minnesota 55103 — Telephone: (612) 292-2150 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402.

T11014 — Personal Care Spray Dispenser/304

An attractive hand held spray dispenser for personal care products designed to be made of injection-molded A.B.S. and polyethylene plastic, consists of a cluster of four egg-shaped compartments mounted on a small round base. The upper half of each compartment is an air reservoir, as is part of the base. The lower half of each compartment is removable and holds a liquid personal care product. Inside the base is a small electrically-driven air compressor which cycles off and on automatically to maintain air pressure in the compartments at between 422 to 703 g/sq cm. The compartments have a common hose to charge them with compressed air, but each one has its own hose for dispensing its product. The four hoses converge upon leaving the compartments and base, and terminate in a single spray head. To use the dispenser, a selector ring is turned at the center of the cluster to choose the compartment wanted and a switch pressed on the spray head. The dispenser automatically emits air first, then the liquid. A release of the spray head switch shuts off the liquid first and the air last, and assures that the next spray will not include remnants of liquid from the previous use. To refill a compartment, the air compressor is first shut off. Residual air is drawn off by depressing the spray head switch slightly. The lower portion of the compartment is unscrewed, filled, and screwed back into place. This simple yet sturdy design and construction spray dispenser has the following advantages: lets the consumer dispense as desired four different liquids, such as hair spray, deodorant, after shave lotion, cologne, mouthwash and perfume; eliminates the expense and disposal problems connected with the purchase of separate aerosol cans; allows products to be purchased in bulk to fill the compartments of the dispenser; and, eases storage by wrapping around the base of the unit, the combined hoses, with the spray head resting in any one of four slots provided between the compartments. A functional prototype, the production drawings and detailed estimated of tooling and parts costs are nearly completed. This technology is available as a total design package for manufacture and marketing, in return for a front-end payment and a royalty agreement.

Possibilités d'acquisition de licences par l'intermédiaire de la Control Data Worldtech, Inc., É.-U.

Les techniques suivantes sont proposées pour la fabrication sous licence au Canada. Lors de la demande de renseignements supplémentaires, veuillez citer le numéro de référence. Écrire à: Data Control Worldtech, Inc., 474 Concordia Avenue, St. Paul, Minnesota 55103 — Téléphone: (612) 292-2150 et envoyer une copie de votre correspondance initiale au Consulat du Canada, 15 South Fifth Street, Minneapolis, Minnesota 55402.

T11014 — Atomiseur multiple pour produits de toilette/304

Atomiseur multiple à main, pour produits de toilette, de conception attrayante en plastique A.B.S. moulé par injection et polyéthylène; le tout prend la forme de quatre compartiments ovoïdes montés sur un petit socle rond. Un réservoir d'air compose la moitié supérieure de chaque compartiment ainsi qu'une partie du socle. Les moitiés inférieures des compartiments sont amovibles et peuvent contenir différents produits liquides pour la toilette. Le socle renferme un petit compresseur d'air électrique dont le fonctionnement automatique permet de maintenir une pression de 422 à 703 g/cm^2 dans les compartiments. Ces derniers sont alimentés en air comprimé par un seul tuyau, mais chacun d'eux possède son conduit de vaporisation pour son propre produit. A partir des compartiments et du socle, les quatre conduits convergent vers une tête de vaporisation unique. Pour utiliser l'appareil, il suffit de choisir le produit voulu à l'aide d'un sélecteur situé au centre des quatre compartiments, puis de presser l'interrupteur placé sur la tête de vaporisation. Automatiquement, l'appareil dispense d'abord de l'air, puis le liquide. En relâchant l'interrupteur, l'arrivée du liquide est interrompue et un jet d'air purge le conduit: ainsi, le vaporisation suivante ne contient pas de reste de la précédente. Pour recharger un compartiment, on arrête d'abord le compresseur, puis on purge l'air en appuyant légèrement sur l'interrupteur de tête. On dévisse la partie inférieure du compartiment, on la remplit et on la revisse. Cet atomiseur, de conception simple et de construction solide, offre divers avantages: choix de quatre liquides différents, soit par exemple laque, désodorisant, lotion après rasage, eau de cologne, rince-bouche, parfum; élimination des frais et de la mise au rebut entraînés par l'achat d'aérosols; achat en gros des produits de remplissage; rangement facilité par l'enroulement des tuyaux autour du socle et la tête de vaporisation qui peut se loger dans l'une des quatre fentes disposées entre les compartiments. Un prototype, les dessins de fabrication et les prix estimatifs de l'outillage et des pièces seront très bientôt disponibles. Ce nouveau produit est offert sous forme d'un ensemble conceptuel global en vue de sa fabrication et de sa vente, contre un versement préliminaire et des redevances convenues.

T11147 — Radio Frequency (RF) Energy Filter/304

A newly-invented filter of radio frequency (RF) energy of particular use in enabling microwave ovens to brown food conveniently and safely, and also filter out RF energy produced by other electronic devices. This filter offers a feasible method of building a browning component, such as a quartz lighting tube, into a microwave oven. The technology uses a small container of a dielectric liquid to absorb unwanted RF energy. In the case of a microwave oven fitted with a quartz browning light, the wiring for the light, which leads RF energy to the outside, runs through the dielectric liquid. RF energy is absorbed by the liquid without interference to the ordinary current flow. It is expected this will greatly increase the convenience and versatility of these popular appliances and attract consumers to buy microwave ovens equipped with the built-in browning component. Owners of microwave ovens will most likely want to purchase newer models. The inventor of this technology has applied for a patent and has built a prototype RF energy filter which is now undergoing a rigorous and extensive testing program. Licensing of the technology is available for production in Canada and marketing on a worldwide basis for a front-end payment and royalties.

T11147 — Filtre d'énergie radiofréquence (RF)/304

Un filtre d'énergie radiofréquence (RF), d'invention récente, peut servir en particulier à faire brunir les aliments de façon pratique et sécuritaire dans les fours à micro-ondes, et peut de plus éliminer l'énergie RF produite par d'autres appareils électroniques. Grâce à ce filtre, il est possible d'inclure dans le four à micro-ondes un dispositif qui sert à faire brunir les aliments, comme par exemple une lampe de quartz. Le filtre comprend un petit contenant renfermant un liquide diélectrique qui absorbe l'énergie RF indésirable. Dans le cas d'un four à micro-ondes équipé d'une lampe de quartz à brunir les aliments, le fil de la lampe passe dans le liquide diélectrique qui absorbe l'énergie RF qui serait autrement rayonnée à l'extérieur du four. Le filtre n'a aucune influence sur le courant d'alimentation de la lampe. On s'attend à ce que ces populaires appareils ménagers deviennent beaucoup plus pratiques et versatiles à cause de ce dispositif et que le consommateur ait tendance à vouloir acheter les fours à micro-ondes équipés dù dispositif pour brunir les aliments. Les propriétaires de fours micro-ondes voudront très probablement se procurer les plus récents modèles. L'inventeur de cet appareil a fait une demande de brevet et a construit un prototype de filtre d'énergie RF qui est présentement soumis à un programme d'essai rigoureux et complet. Il offre la licence pour la fabrication au Canada et la commercialisation mondiale du produit, contre un paiement initial et les redevances.

T11151 — Locking Mechanism for Telescoping Poles/304

A patented mechanism to lock/unlock the sections of a telescoping adjustable length pole of any kind. It features the following characteristics: a double locking mechanism provides extra stability, securely holding the pole to the length at which it is set; the entire locking mechanism is inside the pole, while other kinds are mounted externally; being inside the pole, the mechanism is well-protected from the elements and thus has less chance of jamming, will last longer, and allows a cleaner-looking design wherever it is employed. This locking mechanism has application wherever a telescoping pole is or may be used, such as: boat and tent poles; collapsing shovels and other tools; adjustable-height medical stands, such as plasma and IV solution stands; microphone and light stands, radio and television antennae; window-washing rods and paint roller extensions; and, other applications too numerous to list individually. The inventor of this technology has already adapted it for use in a prototype telescoping adjustable-length ski pole. He has used this pole himself for a number of years, subjecting it to in-the-field testing under real-world conditions without problems. This particular application in a telescoping ski pole allows: ski rental facilities to drastically reduce the number of ski poles stocked to fit skis of different heights; parents to purchase only one set of poles for their children; instead of buying several sets of steadily longer poles to match the growing children's heights; and, the poles to be easily telescoped for transporting in a minimum of space. Since this locking mechanism has withstood the stress and wear of years of use in a ski pole, it is likely to withstand any normal wear in other applications. The technology is patented and exists in a prototypical ski pole version. License of the patent is available for a front-end payment plus a royalty.

T11151 — Mécanisme de verrouillage de pieds télescopiques/304

Il s'agit d'un mécanisme breveté permettant de verrouiller et de déverrouiller les sections de pieds télescopiques de toutes sortes. Il présente les caractéristiques suivantes: le verrou double assure une plus grande stabilité du pied, qu'il maintient à la longueur choisie; le mécanisme entier est dissimulé dans le pied, à l'abri des intempéries; il risque moins de bloquer, dure plus longtemps et ne dégrade pas l'esthétique du pied. Ce verrou peut s'employer là où se trouvent ou peuvent se trouver des pieds télescopiques: poteaux de tentes et de bateaux, pelles et autres outils télescopiques, supports médicaux réglables en hauteur (support de bouteilles de plasma et de solution intraveineuse), perches de micros et de lampes de studio, antennes de radio et de télévision, rallonges pour le lavage de vitres et la peinture au rouleau, ainsi que d'autres champs d'application trop nombreux pour être énumérés. L'inventeur du mécanisme l'a déjà adapté à un prototype de bâton de ski réglable en longueur; il s'en est lui-même servi pendant quelques années et l'a soumis avec succès à des essais sur piste. Les bâtons réglables présentent les avantages suivants: les entreprises de location de skis peuvent réduire considérablement leur inventaire de bâtons, dont la longueur dépendait auparavant de la longueur des skis; les parents peuvent se contenter d'acheter une seule paire de bâtons à leur enfant au lieu de devoir en acheter de plus longs à mesure que l'enfant grandit; les bâtons peuvent être raccourcis pour mieux se transporter. Etant donné que le verrou de ces bâtons a bien toléré des années d'usure et de contraintes, il pourra vraisemblablement endurer une usure normale dans d'autres domaines. La technique est brevetée et un prototype de bâtons de ski existe. La licence du brevet est disponible moyennant une avance et une redevance.

T12012 — Laser Welds Metal Strips to Form Continuous Belt/304

A system to butt weld the ends of thin metal strips to form a continuous belt. It handles metal strips in thicknesses ranging from 0.001 to 0.015 cm. Any length of belt above 5 cm circumference is possible. The weld fixture design is patented. The entire process is documented and the tooling is designed for 0.015 cm x 1.563 cm x 133 cm long. The process is readily adaptable to other dimensions. A feature of this process is that the butt weld maintains the same physical properties as the base metal because no filler material is used. Besides the cost of the belt material itself, the only costs incurred are to: from the weld tabs, square the ends of the strip, laser weld and trim the weld zone to width. Accuracy of plus or minus 0.0025 cm in length is attainable. The weld history of each joint may be preserved by filing the trimmed off weld tabs.

T12012 — Soudures au laser pour fermer des bandes de métal/304

Système de soudage bout à bout pour fermer les extrémités de minces bandes de métal. Admet des bandes de métal de 0,001 à 0,015 cm d'épaisseur et de plus de 5 cm de circonférence. Le procédé de soudage, qui est breveté, est entièrement documenté. L'outillage est adapté à des pièces de 0,015 x 1,563 x 133 cm et peut être modifié pour recevoir des pièces d'autres dimensions. Une caractéristique du procédé est que la soudure bout à bout a les mêmes propriétés physiques que le métal de base en raison de l'absence de matériau d'apport. Mis à part le coût du matériau même qui constitue la bande, les seuls coûts qui interviennent sont les coûts pour former les languettes de soudure, dresser les extrémités de la bande, réaliser la soudure au laser et ajuster la largeur de la zone de soudure. Une précision de plus ou moins 0,0025 cm dans le sens de la longueur est possible. Pour garder trace de chaque joint de soudure, on peut conserver les languettes de soudure.

T12017 — High Resolution Glass-Etching Process/304

A proven and in-production process for precisely etching grooves in plates of soda-lime float glass. The process can be used for general glass patterns or engraving, as well as to accurately place paste or liquid deposits. Some specific applications thus far have been: forming precise thick-film conductors or resistors on very large substrates; depositing magnetic coatings in clearly-defined tracks for magnetic sensing devices; and, etching grooves in glass for precise alignment of small mechanical assemblies. This technology has been in constant development since approximately 1975 and is currently being used to fabricate plasma display panels. These panels are etched with grooves 75 microns wide by 30 microns meters deep on substrata 266 x 305 mm with less than a handful of flaws over the 130 meters of etched grooves on such substrata. The process consists of: cleaning and preparing the glass surface; applying photo-resist coating and allowing it to dry; exposure, development, and curing of the photo-resist; etching the glass; and, removing the photo-resist and cleaning the glass. It is comparable with in-line equipment and allows processing of a relatively large number of substrata in one day with minimal labor. The technology is available for a lump sum or a front-end payment plus a royalty.

T12017 — Gravure de précision sur verre/304

Procédé éprouvé utilisé pour rainurer avec précision des plaques de verre flotté soude-chaux, et pouvant être utilisé à des fins générales comme la gravure ou le dessin de motifs sur du verre, ou bien pour déposer avec précision une pâte ou un liquide. Voici des applications faites jusqu'à maintenant: réalisation précise de conducteurs ou de résistances sous forme de film épais sur de grands substrats; dépôt de revêtements magnétiques dans des pistes bien définies pour des dispositifs à capteurs magnétiques; gravure de rainures dans du verre pour l'alignement précis de petits ensembles mécaniques. La technologie, en constante évolution depuis environ 1975, est actuellement utilisée pour fabriquer des panneaux d'affichage à plasmas. Les rainures de ces panneaux ont 75 microns de large et 30 microns de profondeur; le substrat mesure 266 x 305 mm; les imperfections se comptent sur les doigts d'une main malgré la longueur totale gravée — 130 mètres. Voici en quoi consiste le procédé: nettoyage et préparation de la surface du verre; application d'une couche de photoresist qu'on laisse sécher; exposition, développement et fixation du photoresist; gravure; suppression du photoresist et nettoyage du verre. Cela peut être exécuté à la chaîne, ce qui permet le traitement d'un grand nombre de supports par jour avec un minimum de main-d'oeuvre. Contre le paiement d'un forfait, ou d'un versement initial et de redevances, on peut obtenir la licence de ce procédé.

Licensing Opportunities Through the Foundation of Osaka Science and Technology Center, Japan

The following technologies are offered for manufacture under license in Canada. When requesting additional information, please quote the reference number. Write: International Department, The Foundation of Osaka Science and Technology Center, 1-8-4, Utsubo Hommachi, Nishi-ku, Osaka, Japan and send a copy of your initial correspondence to Commercial Division, Embassy of Canada, 3-38 Akasaka 7 — Chome, Minato-ku, Tokyo 107, Japan.

PVC Pipe Joint/304

Kubota, Ltd. of Japan has developed an improved joint for PVC pipes which offers better sealing and flexibility under load on which it is offering patent licensing, know-how licensing and cross licensing arrangements worldwide. Patents are pending in 12 countries. The joint features double-groove seating of the rubber gasket which ensures improved seating and sealing, and a flared configuration permitting the inserted pipe to have room for movement to a degree that it can accommodate linear movement of the pipe to a maximum of 3.5 to 4.5 degrees. This affords substantial improvement in flexibility compared with conventional PVC pipe joints. Field joining of the pipe is possible as the insertion force required is substantially the same as for conventional pipe joints. The doublewedge seating of the rubber gasket is claimed to prevent its slipping and rolling within the joint. The joint forming equipment, on which patents are pending in 40 countries, can form joints on pipe of diameters ranging from 75 mm to 500 mm. The equipment can be easily linked to conventional PVC pipe molding lines and produces the new joints automatically. Kubota proposes to market the technology for the new PVC pipe joints all over the world. Purchasers can either buy rights to the special mold for forming the new joint or a complete molding unit. These pipes, have application in municipal water pipes, irrigation pipes, etc. Reference No. KU1-3 (17-11).

Heat Resistant Aluminum Alloy Conductors/304

Sumitomo Electric Industries, Ltd. offers patent and know-how licensing under Canadian patents 921,732 and 947,118 for its heat resistant and high strength aluminum alloys for overhead transmission lines having superior continuous operating temperatures of 150°C-230°C, compared with 90°C of EC-A1 (AA1350). The alloys can increase the current capacity of ACSR by up to 1.6-2.0 times. The con-

Possibilités d'acquisition de licences par l'intermédiaire du Foundation of Osaka Science and Technology Center, Japon

Les techniques suivantes sont proposées pour la fabrication sous licence au Canada. Lors de la demande de renseignements supplémentaires, veuillez citer le numéro de référence. Écrire à: International Department, The Foundation of Osaka Science and Technology Center, 1-8-4, Utsubo Hommachi, Nishi-ku, Osaka, Japan et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Division commerciale, 3-38 Akasaka 7 — Chome, Minato-ku, Tokyo 107, Japon.

Raccord de tuyau en CPV/304

Kubota, Ltd. du Japon, a mis au point un raccord amélioré, pour tuyaux en CPV qui offre une meilleure étanchéité et une flexibilité accrue sous pression, et pour lequel la firme offre les droits d'exploitation des brevets et des procédés techniques ainsi que la concession réciproque de licences pour le monde entier. Des brevets sont déposés dans 12 pays. Ce raccord est caractérisé par l'ajustage à doubles gorges de son joint de caoutchouc qui améliore l'ajustage et l'étanchéité, et par sa configuration évasée qui laisse au tuyau qui y est inséré une liberté de mouvement telle que le raccord peut supporter un déplacement linéaire maximum du tuyau de 3.5 à 4.5 degrés, ce qui constitue une amélioration considérable de la flexibilité par rapport aux raccords de CPV traditionnels. L'assemblage du tuyau peut être fait sur place puisque la force nécessaire à l'insertion est approximativement la même que pour les raccords traditionnels. Le joint de caoutchouc à doubles gorges ne peut glisser ni tourner à l'intérieur du raccord. L'équipement de fabrication des raccords, pour lequel des brevets ont été déposés dans 40 pays, permet de réaliser des raccords sur des tuyaux de 75 mm à 500 mm de diamètre. Il peut facilement être intégré aux lignes de fabrication traditionnelles des tuyaux de CPV et produire des raccords automatiquement. Kubota se propose de commercialiser la technologie pour les nouveaux raccords de tuyau en CPV dans le monde entier. Les acheteurs peuvent acheter les droits sur le moule spécial pour former les nouveaux raccords, ou sur l'appareil de moulage complet. Ces raccords peuvent être utilisés pour les canalisations d'eau municipales, les tuyaux d'irrigation, etc. N° de référence: KU1-3 (17-11).

Conducteurs en alliages d'aluminium résistants aux hautes températures/304

Sumitomo Electric Industries, Ltd. offre la licence de brevet et la licence de know-how (brevets canadiens 921,732 et 947,118) relativement à ses alliages d'aluminium à haute résistance mécanique pour lignes de transmissions suspendues, pouvant fonctionner à des températures très élevées: 150 à 230°C, comparativement à 90°C pour l'alliage EC-A1 (AA1350). Ces alliages peuvent augmenter

tinuous operating temperatures and electrical conductivity of the alloys are as follows: 150°C-60% IACS (TA1), 200°C-58% IACS (SSTA1), and 230°C-58% IACS (XTA1). High-strength aluminum alloy conductors have high strength with high electrical conductivity, as follows: 26 kg/mm^2 (255MPa)-58.5% IACS (SI-26) and 33 kg/mm^2 (324MPa)-54% IACS (SI-33). Reference No. SU1-20 (12-26).

Titanium Coating Compound Technology/304

Sumitomo Electric Industries, Ltd. offers joint venture, patent licensing, know-how licensing or cross licensing rights for its titanium compound coating technology for high speed steel tools by an ion plating process which it claims: can improve tool life of high speed steel tools 2 to 6 times; does not create problems even if precision tools (hobs, etc.) are coated; the coated high-speed steel tool maintains its life even if the rake face is reground. Patents are issued only in Japan and the U.S.A. on this technology. Reference No. SU1-19 (11-28).

la capacité en courant des câbles d'un facteur de 1.6 à 2.0. Les températures de fonctionnement continu et les valeurs de la conductivité électrique des alliages sont: 150°C et 60% pour le câble IACS (TA1), 200°C et 58% pour le câble IACS (SSTA1) et 230°C et 58% pour le câble IACS (XTA1). La résistance mécanique des conducteurs en alliage d'aluminium est grande et leur conductivité électrique est élevée: 26 kg/mm^2 (255 MPa) et 58.5% pour le câble IACS (SI-26) et 33 kg/mm^2 (324 MPa) et 54% pour le câble IACS (SI-33). N° de référence: SU1-20 (12-26).

Technique de revêtement à base de titane/304

Sumitomo Electric Industries, Ltd. propose une association en participation, une licence de brevet, une licence de savoir-faire ou une concession réciproque de licences pour sa technique d'application par ionisation du revêtement à base de titane sur les outils en acier rapide. Sumitomo Electric certifie que son procédé: peut prolonger de 2 à 6 fois la vie des outils en acier rapide; ne pose aucun problème, même s'il faut recouvrir des outils de précision (outil-mère, etc.); conserve l'usage de l'outil en acier rapide recouvert même après affûtage. Cette technique n'est brevetée qu'au Japon et aux É.-U. Référence n° SU1-19 (11-28).

Bibliography

DOMESTIC AND INTERNATIONAL LICENSING OF TECHNOLOGY/304

Price: U.S. $25.00, pp. 677, published in 1980 by the Practising Law Institute (PLI), 820 7th Avenue, New York, N.Y. 10019. Includes basic licensing considerations, licensing clauses and agreements, patent regulations, etc.

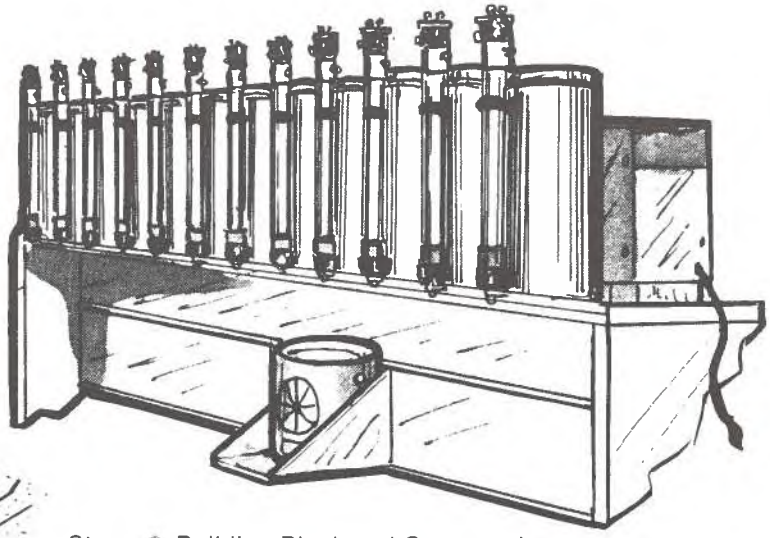
Bibliography

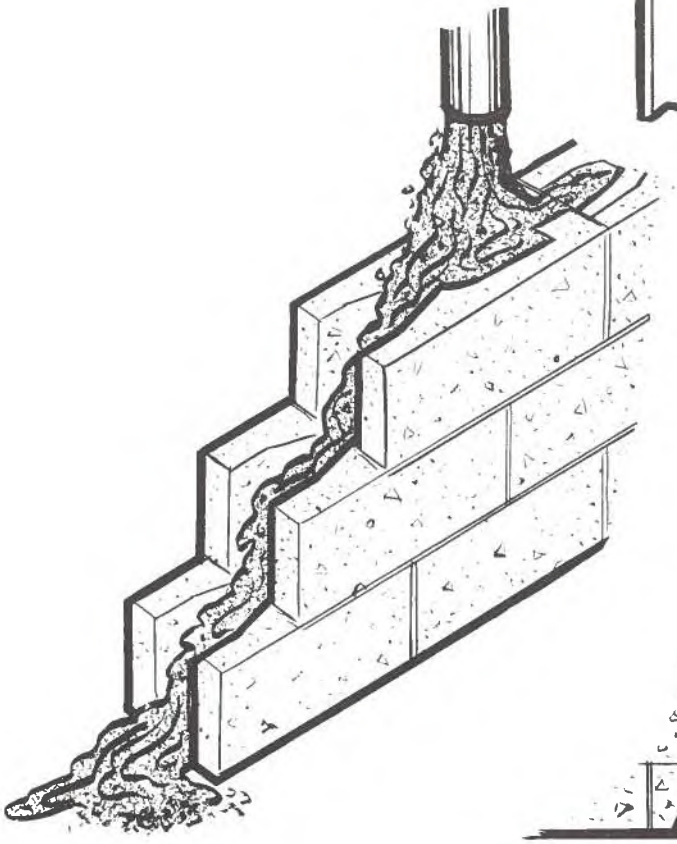
PATENT LICENSING TRANSACTIONS: FORMS 1980/304

Price: U.S. $130.00, two volumes by Harold Einhorn and Thomas E. Costner covering practically every phase of patent licensing procedures. Arranged in a problem-solving format, this reference work provides full up-to-date coverage of principal rights and obligations, royalties, foreign licensing, misuse and anti-trust considerations, as well as over 300 pages of illustrative forms of domestic and foreign license agreements. Available from Matthew Bender, 235 East 45th Street, New York, New York 10017.

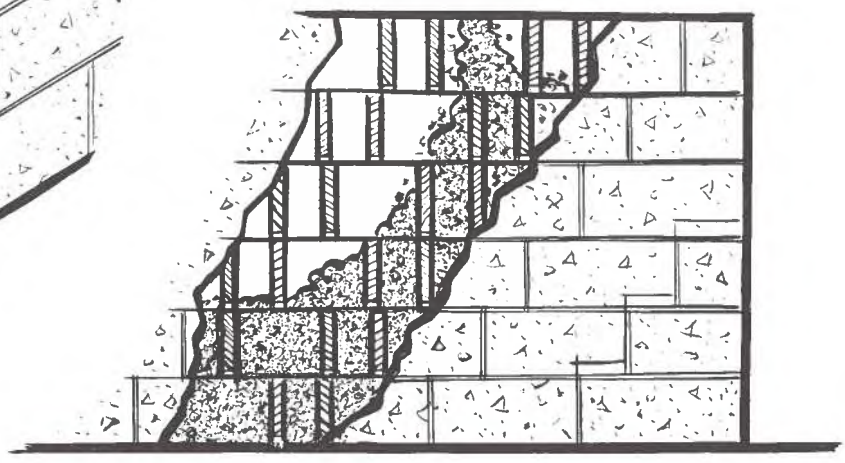
Traction Ramps (See page 4) ▲
Rampes de traction (Voir page 4) ◀

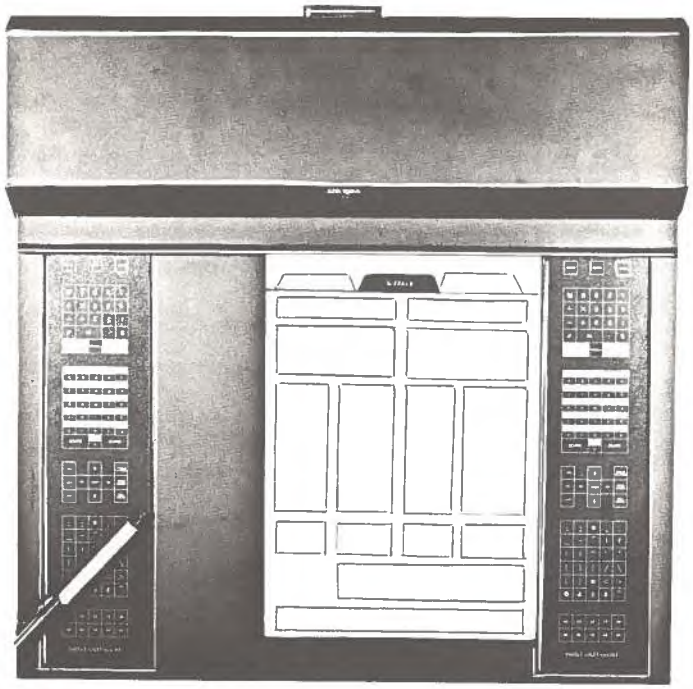
Color Tinting Machines
(See page 4) ▶
Machines à préparer la peinture
(Voir page 4)



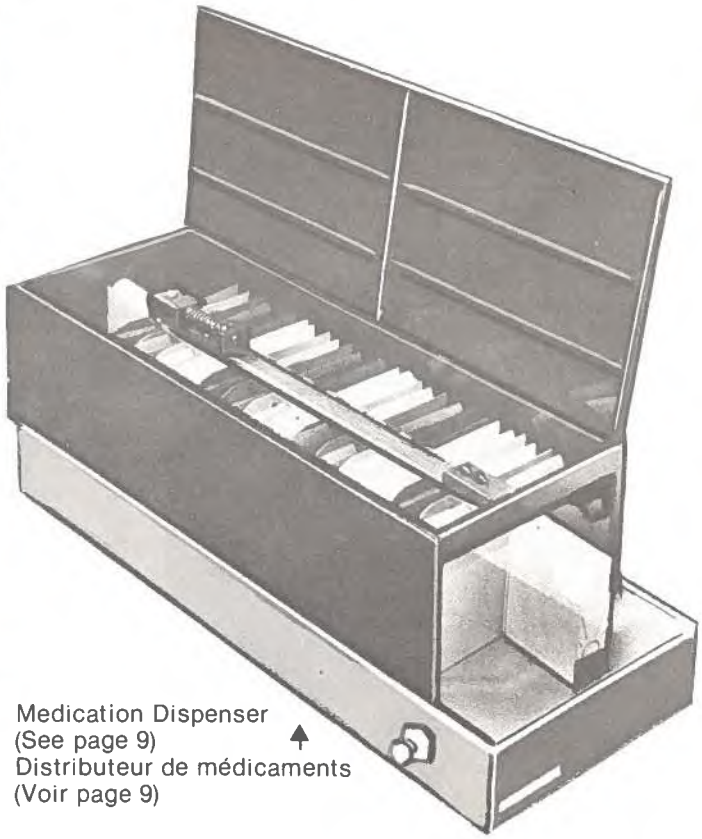


Stepoc® Building Block and Construction
Method (See page 4) ◀
Blocs de béton et procédé de construction
Stepoc® (Voir page 4) ▼

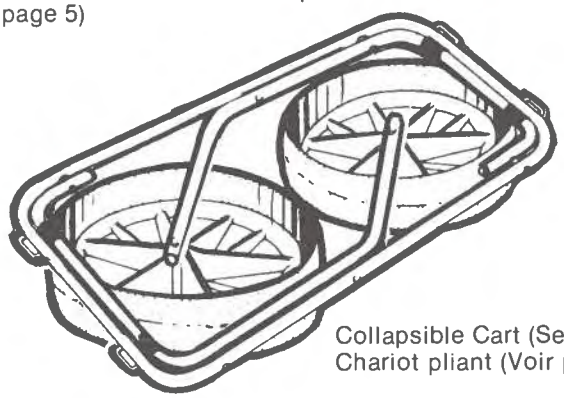




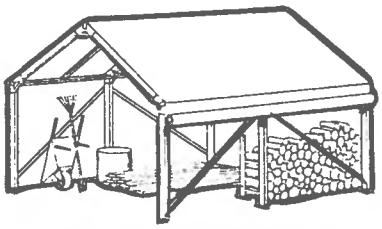
Data Tablet (See page 5)
Tablette d'entrée de données
(Voir page 5)

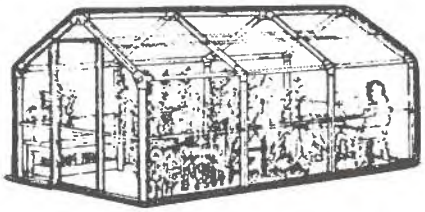


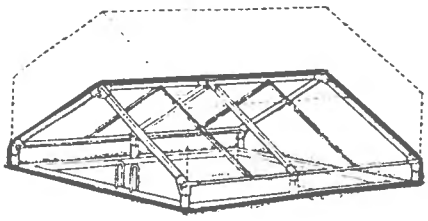
Medication Dispenser
(See page 9)
Distributeur de médicaments
(Voir page 9)



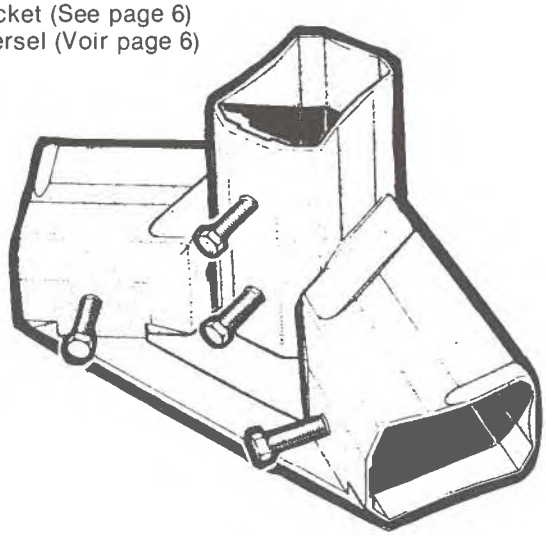
Collapsible Cart (See page 7)
Chariot pliant (Voir page 7)

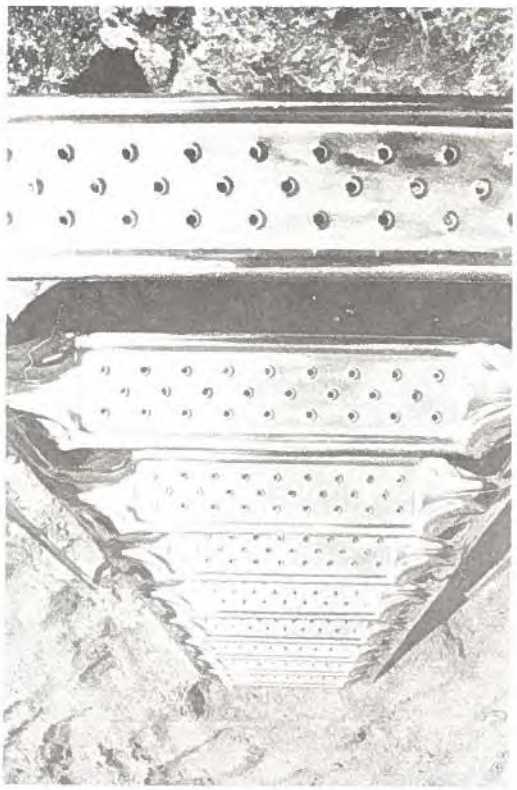






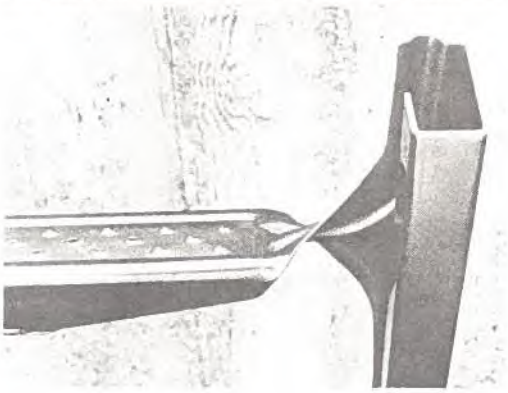
Universal Bracket (See page 6)
Raccord universel (Voir page 6)





Electrostatic Emulsifier
(See page 14)
Émulseur électrostatique
(Voir page 14)

Metal Ladder (See page 10)
Échelle métallique (Voir page 10)



Folding Stroller and Low Beach Chair
(See page 14)
Poussette et chaise de plage pliantes
(Voir page 14)

IF UNDELIVERED RETURN TO:
Licensing Opportunities Section (34/3)
Business Centre
Dept. Industry, Trade and Commerce
Ottawa, Canada K1A 0H5

EN CAS DE NON-LIVRAISON RENVOYER À:
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Ministère de l'Industrie et du Commerce
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