new products bulletin

bulletin de produits nouveaux

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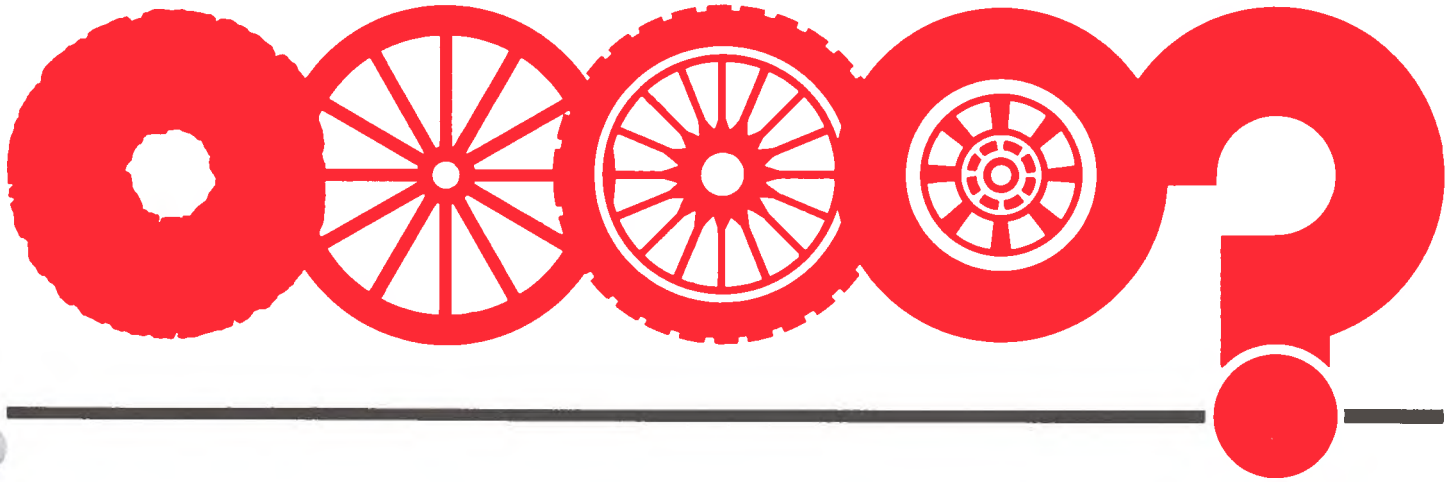

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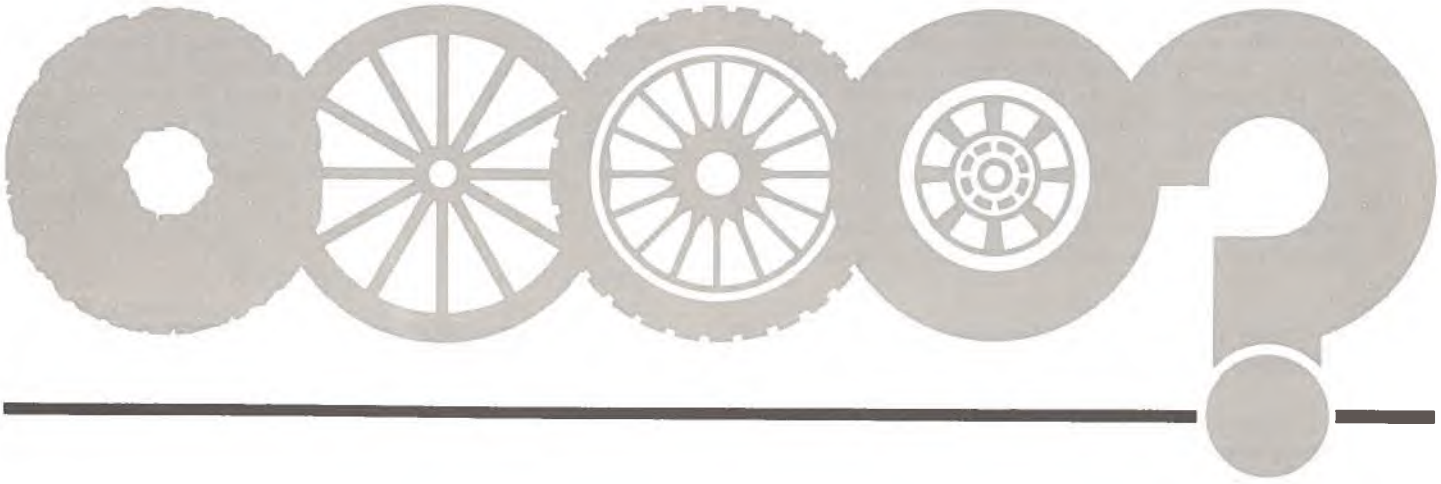
This monthly bulletin is published to inform Canadian industry of licensing and joint venture opportunities that may be investigated for the purpose of forming manufacturing affiliations. The Department cannot assume any responsibility for claims made or for transactions which ensue from the publication 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

Tree Cross-Cutting Blade/303

A tree shear blade designed to minimize damage to the tree during warm or cold shearing. The wedge-shaped, curved ribs on the shear blades produce a log with 60% less damage than standard shear blade pairs. Write: Case 5378, 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.

Three Axis Fluxgate Magnetometer Sensor/303

A fluxgate magnetometer sensor which measures the three mutually orthogonal components of a magnetic field at a single point in space. Such a sensor eliminates measurement errors caused by the unavoidable physical spacing of three single axis sensors configured to measure the orthogonal components of a magnetic field. Write: Case 6950, 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.

Measuring Velocity or Displacement of Ferromagnetic Materials/303

A transducer comprising two magnetic heads a known distance apart and some novel circuitry can be used to determine the time for any point on a moving ferromagnetic medium to traverse this known distance. Some obvious applications are measuring the angular or linear velocity or displacement of pulleys, railway wheels, railway cars, steel strip, etc. Write: Case 6986, 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.

Circuitry for Obtaining Samples of the I and Q Components of a Bandpass Signal/303

This circuitry provides samples of the in-phase (I) and quadrature (Q) components of a bandpass signal by sampling the original input signal with a clock that is slaved to

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

Lame de tronçonneuse d'arbres/303

Lame de tronçonneuse d'arbres conçue afin de réduire au minimum les dégats causés à l'arbre durant la coupe en travers à chaud ou à froid. Les nervures incurvées et à bord tranchant de ces lames de tronçonneuse produisent une bille 60% moins abîmée qu'une bille produite par les paires de lames de tronçonneuse courantes. Écrire: Cas 5378, 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.

Capteur magnétométrique triaxial à saturation/303

Capteur magnétométrique à saturation qui mesure les trois composantes orthogonales d'un champ magnétique en un point de l'espace. Un tel capteur élimine les erreurs de mesurage découlant de l'écartement obligatoire qu'il doit y avoir entre trois capteurs uniaxial montés de façon à mesurer les composantes orthogonales d'un champ magnétique. Mesurage du déplacement ou de la vitesse de matériaux. Écrire: Cas 6950, 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.

Ferromagnétiques/303

Un transducteur, constitué de deux têtes magnétiques distantes d'une longueur connue et de nouveaux circuits, peut servir à déterminer le temps qu'il faut à un point d'un matériau ferromagnétique en mouvement pour parcourir cette longueur connue. Voici certaines applications évidentes de ce dispositif: mesurage de la vitesse ou du déplacement angulaire ou linéaire de poulies, de roues de wagons ferroviaires, de voitures de chemins de fer, de courroies d'acier etc. Écrire: Cas 6986, 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 prélèvement d'échantillons des composants I et Q d'un signal passe-bande/303

Ces circuits permettent de recueillir les composantes en phase (I) et en quadrature de phase (Q) d'un signal passe-bande en échantillonnant le signal d'entrée initial avec une

the I. F. centre frequency. This avoids problems usually encountered with conventional methods of sampling; e.g., the need for D.C. amplification, expensive components and/or extensive processing. Applications include radar, sonar and digital communications systems. Write: Case 6995, 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.

horloge asservie à la fréquence centrale F.I. Cette solution écarte les problèmes qui affectent généralement les méthodes d'échantillonnage classiques: par ex. besoin d'une amplification du signal continu, composants coûteux et traitement intensif. Parmi leurs domaines d'utilisation, mentionnons le radar, le sonar et les systèmes de télécommunications numériques. Écrire: Cas 6995, 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.

Safety Wheel Chocks/303

Canadian manufacturer willing to discuss either outright sale or a joint venture partnership for the manufacturing and marketing rights for the WAY-MAR-LIN® wheel chock for use in restraining the movement of stationary vehicles such as cars and light trucks. There is also a larger model for ambulances, buses, trailers and heavy trucks up to a gross weight of 45000 kg. When parked on virtually any grade, with or without brakes, and on asphalt surfaces or soft shoulders, it will keep the vehicle from rolling off the jack in situations such as: changing a wheel, working underneath or to block the vehicle where there is an incline driveway. This design will not damage the tire and will actually increase holding power as weight of the wheel is applied. A lug at the end of the chock assures better grip on solid ice surfaces while the flat bottom keeps the chock from sinking in ground surfaces. The small set weighs approximately 2.25 kg, is made from a .60 cm x 5 cm iron bar and the chock stands 12.5 cm high x 22.5 cm long. The large set weighs approximately 6.75 kg, stands 30 cm high by 40 cm long and 10 cm wide. Write: Mr. Omer St. Amand, 1261 Lincoln Road, Sudbury, Ontario P3A 3S3 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.

Cales des roues/303

Un fabricant canadien désire négocier une vente forfaitaire des droits ou une association pour la fabrication et la commercialisation des cales de roues WAY-MAR-LIN® servant à bloquer des véhicules légers en stationnement (voitures, camionnettes). Un modèle plus gros existe pour les véhicules lourds dont le poids brut peut atteindre 45 000 kg (ambulances, autobus, remorques, camions). Que le véhicule soit stationné sur pratiquement n'importe quelle pente, freins serrés ou pas, sur une surface dure ou molle, ces cales empêcheront le véhicule monté sur cric de rouler (changement de roue, travaux sous la voiture). Elles servent aussi à retenir un véhicule sur une entrée de garage en pente. Leur forme les empêche d'endommager le pneu et accroît leur pouvoir d'adhérence sous le poids de la roue. Un ergot à l'extrémité de chaque cale lui permet de s'accrocher aux surfaces glacées alors que le fond plat l'empêche de s'enfoncer dans les sols meubles. La paire de petites cales pèse environ 2,25 kg; chaque cale est faite d'une barre de fer de 0,6 cm d'épaisseur et de 5 cm de largeur et mesure 12,5 cm de hauteur par 22,5 cm de longueur. La paire de grandes cales pèse environ 6,75 kg et mesure 30 cm de hauteur par 40 cm de longueur et 10 cm de largeur. Écrire à: M. Omer St. Amand, 1261 Lincoln Road, Sudbury (Ontario) P3A 3S3 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.

Shower and Water Heaters/303

European manufacturer of electrical resistance instantaneous water heaters seeks Canadian manufacturers to construct and market its total product line under license in Canada. The line includes over sink units, shower wall mounted units with or without hand held shower head and flexible hose. Units are equipped with either single valve or two valve temperature control. Advantages are space saving, and an energy saving heating method utilizing no storage tank; it requires only one (cold water) line. Also included in the line is a fibreglass shower stall with an integrated water heater. The system is particularly advantageous in installations such as apartments, bars, recreational vehicles, motor vessels, summer cottages, trailers, construction camps, etc. The manufacturer has to be familiar with C.S.A. and U.L. manufacturing methods. Must have access to injection moulding and fibreglass manufacturing processes in addition to electrical manufacturing. Write: Gamma Products Limited, 5th Floor, Suite 505, Royal Trust Building, Water Street, P.O. Box 1161, St.

Chauffe-eau et chauffe-douches/303

Un fabricant européen de chauffe-eau instantanés à résistance électrique est à la recherche de firmes canadiennes pour la fabrication et la commercialisation de toute sa gamme de produits sous licence au Canada. Cette gamme inclut des appareils pour évier, des appareils de douche muraux avec ou sans pomme de douche manuelle et flexible. Ils sont équipés d'un mélangeur à un seul ou à deux robinets. Leurs avantages sont l'économie d'espace et d'énergie grâce à un système de chauffage n'utilisant pas de réservoir et il n'y a pas besoin d'une canalisation d'eau chaude. La gamme comporte également une cabine de douche en fibres de verre avec chauffe-eau intégré. Ce système est particulièrement avantageux dans les appartements, les bars, les véhicules de plaisance, les embarcations motorisées, les chalets d'été, les roulottes, les cabanes de chantier, etc. Le fabricant doit bien connaître les méthodes de fabrication de l'ACNOR et des Laboratoires des Assureurs. Il doit également avoir accès aux procédés de moulage par injection et de fabrication d'élé-

John's, Newfoundland A1C 5M5 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.

ments en fibres de verre, en plus de pouvoir fabriquer des composants électriques. Écrire à: Gamma Products Limited, 5th Floor, Suite 505, Royal Trust Building, Water Street, P.O. Box 1161, St. John's, Newfoundland A1C 5M5 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.

Mortar-Runner/303

Canadian agent offers the Canadian manufacturing, marketing and export rights to selected areas for the "Mortar-Runner" developed in the U.S. as a means to speed up the laying of blocks and bricks and to reduce labour costs up to 50 percent and the use of mortar by 40 percent. A sample of the "Mortar-Runner", which is made with simple fabricating equipment, is available in Canada to interested prospective licensees to view, examine and test. A film (sound) demonstrating the product in operation is also available. Patents have been issued in Canada, the U.S. and other countries. Interested parties should have the ability to manufacture, a good marketing organization (including contacts with contractors, leasing organizations) and be prepared to demonstrate the product in order to illustrate its savings. Agent will provide additional information and direct contact with the licensor. (See illustration page 32). Write: Lomar Trading Co. Ltd., 1384 Tyandaga Park Drive, Burlington, Ontario L7P 1N3 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.

Pose-mortier/303

Un agent canadien offre les droits de fabrication, de commercialisation et d'exportation, dans certains secteurs choisis, du "Mortar-Runner", un pose-mortier mis au point aux États-Unis pour accélérer la pose de parpaings et de briques, réduire les frais de main-d'oeuvre jusqu'à 50 p. 100 et réaliser une économie de mortier de 40 p. 100. L'appareil, dont la fabrication fait appel à un matériel fort simple, est mis au Canada à la disposition des intéressés pour examen et essai. Un film sonore montre également l'appareil en action. Des brevets ont été émis au Canada, aux États-Unis et dans certains autres pays. Les intéressés doivent être en mesure de fabriquer l'appareil, posséder un bon mécanisme de commercialisation, y compris des relations avec les entrepreneurs et les services de location d'outils, et être prêts à faire la démonstration du produit afin d'en prouver l'aspect économique. L'agent fournira les renseignements supplémentaires et établira les relations avec le concédant. (Voir l'illustration page 32.) Écrire à: Lomar Trading Co. Ltd., 1384 Tyandaga Park Drive, Burlington (Ontario) L7P 1N3 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.

Digital Darkroom Computer/303

American inventor offers a Canadian company the manufacturing and marketing rights to its "GENIE" CPS-500 Compu-Photo System. The instrument has been designed to accurately compute the printing of negatives or slides (transparencies) in black and white or colour photography and transfer into one digital reading the density of the film, printing papers and required filtration plus equipment. The digital reading is in exposure time which can be controlled to 100% accuracy down to 1/10th of a second. It has also a built-in densitometer and it is claimed to have a 100% accuracy of exposure by choice of the operator and is designed to replace the inaccurate readings of all colour analyzers and densitometers currently in use. The computer may be used in all applications of photo printing for the commercial laboratory, all government operations, newspapers and magazines, schools, universities, etc. The instrument is meant to make it possible to print the first photo from negatives and transparencies, black and white or colour, and eliminate the necessity for test printing as is now done with colour analyzers and densitometers at much cost in equipment and material. Furthermore, there is a significant savings in silver. (See illustration page 32.) Write: Mr. Harland K. Cook, Aerial Color Photography, 528 Kingsley Avenue, Waterloo, Iowa 50701 and send a

Ordinateur numérique pour chambre noire/303

Un inventeur américain offre à une société canadienne les droits de fabrication et de commercialisation de son système "GENIE" CPS-500 Compu-Photo. Cet instrument peut calculer avec précision les modalités de tirage de négatifs et diapositives en noir et blanc et en couleurs et convertit en une seule valeur numérique la densité du film, des papiers à tirer et du filtrage nécessaire en tenant compte des possibilités du matériel. La valeur affichée est en fait une durée d'exposition qui peut être réglée avec une précision absolue (100%) jusqu'à 1/10^{e} de seconde. L'instrument est doté d'un densitomètre incorporé qui, selon l'inventeur, reproduit avec une précision absolue l'exposition choisie par l'opérateur et est appelé à remplacer tous les analyseurs de couleurs et densitomètres existants, qui donnent des lectures inexactes. L'ordinateur convient pour tous les travaux de tirage photographique, qu'il s'agisse de laboratoires commerciaux, d'ateliers gouvernementaux, de journaux et de revues, d'écoles ou d'universités, etc. Il rend possible le tirage de la première vue (négatifs ou diapositives, noir et blanc ou couleur) et supprime la nécessité de faire des essais coûteux en matériel et en supports, comme c'est le cas avec les analyseurs de couleur et les densitomètres actuels. En outre, il permet des économies d'argent métallique substantielles. (Voir l'illustration page

copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

Building System/303

Liechtenstein company offers a non-exclusive manufacturing and sales license for its self-supporting steel structure building system. The system consists of hexagonal modules which can be arranged horizontally or vertically for maximum building design flexibility. Each module comprises only three basic steel elements, support columns, lateral and radial girders, and a "star". The support columns are made of seamless steel tubes with third-of-a-hexagon shaped steel plates welded on each end. Column wall thickness is varied to allow for differing loads and the length can be chosen to suit the required storey height. The lateral and radial girders only differ in length and consist of sheet steel folded into channel sections. The steel "star", situated in the centre of each module, connects all six radial girders. The system is suitable for the construction of offices, hotels, schools, apartments, housing, etc., and is claimed to offer a savings in area and space compared to conventional planning grids. Write: Dr. Kurt F. Büchel, Managing Director, 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.

Light Control System/303

Liechtenstein licensing intermediary for a Swiss manufacturer offers the Canadian manufacturing and marketing, and possibly the U.S. marketing rights to its patented and commercially proven electronic control system that saves 40% of the current consumption of gas discharge lamps (mercury or sodium) in the lighting of streets, tunnels, factories, tennis-courts, etc. It is claimed to increase the lifetime of the lamps by a minimum of 50%. Lamps are continuously adapted to the required luminosity for better comfort and safety. Electronics manufacturers will not require any additional investment. Write: Dr. Kurt F. Büchel, Managing Director, 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.

T10600 — Fuel-Saving Fuel Injector Kit for Cummins Diesel Engines/303

American inventor offers a Canadian company nonexclusive worldwide licensing rights on a country-by-country

32.) Écrire à: M. Harland K. Cook, Aerial Color Photography, 528 Kingsley Avenue, Waterloo, Iowa 50701 et faire parvenir une copie de votre correspondance initiale au Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604 (É.-U.).

Éléments de construction/303

Une entreprise du Liechtenstein offre les droits de licence non exclusifs pour la fabrication et la vente de son dispositif de construction autoportant à éléments d'acier. Il s'agit de modules hexagonaux qui peuvent être agencés horizontalement ou verticalement, offrant ainsi une grande souplesse dans la conception. Chaque module n'est composé que de trois genres d'éléments fondamentaux, soit des colonnes de soutènement, des poutres latérales et radiales, et une "étoile". Les colonnes sont en tubes d'acier sans soudure avec tôle d'acier en tiers d'hexagone soudée à chaque extrémité. L'épaisseur de l'acier des colonnes varie pour tenir compte des charges diverses et la longueur peut être choisie en fonction de la hauteur de l'étage. Les poutres latérales et radiales ne diffèrent que par leur longueur et sont formées de profilés d'acier en U. Située au centre de chaque module, l'étoile relie les six poutres radiales. L'ensemble de l'agencement permet la construction de bureaux, d'hôtels, d'écoles, d'immeubles à usage locatif, de maisons, etc., et semble offrir une économie d'espace et de superficie par rapport aux agencements classiques. Écrire à: Dr. Kurt F. Büchel, Managing Director, 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).

Système de commande d'éclairage/303

Une entreprise du Liechtenstein, agissant comme intermédiaire de licence pour le compte d'un fabricant suisse, offre les droits de fabrication et de commercialisation canadiens, et peut-être les droits de commercialisation américains, d'un système de commande électronique breveté qui a fait ses preuves commercialement, et qui permet de réduire de 40% la consommation de courant des lampes à décharge (à vapeur de mercure ou de sodium) utilisées pour l'éclairage des rues, des tunnels, des usines, des courts de tennis, etc. On affirme que le système prolonge la durée de vie des lampes d'au moins 50%. La luminosité des lampes est constamment adaptée aux besoins, assurant un meilleur confort et plus de sécurité. Les fabricants d'appareils électroniques n'auront à faire aucun investissement supplémentaire. Écrire à: Dr. Kurt F. Büchel, Managing Director, 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).

T10600 — Injecteurs économisant le carburant pour moteurs diesels Cummins/303

Un inventeur américain offre de céder à une société canadienne les droits de licence non exclusifs pour le monde

basis excluding the U.S.A.; the exclusive licensing rights country-by-country for a front-end payment plus royalty or a joint venture arrangement for its fuel-saving fuel injector kit for Cummins diesel engines. This technology consists of a replacement barrel and plunger kit for type D and type K fuel injectors of Cummins diesel engines. Tests using these new and improved barrels and plungers have shown improvements in engine performance as high as: 15 to 20 percent less fuel consumption; 6 to 8 percent more horsepower; and, emissions reduced 23 percent. The barrel and plunger kits are interchangeable with the original equipment units and require no modifications to the engine. The kits are applicable to all Cummins diesel engines with the type D or type K injectors, making them usable in over-the-road transportation, electrical generators, shipping, heavy equipment, etc. All the fuel passages within the injector are formed without openings to the outside. The injector has a coined seat for the ball check in the fuel distribution passage, the depth of which is held to 0.0254 mm for flutter-free operation and positive shut-off. The fuel exit port is in the shape of a rectangle for improved fuel flow. The end surfaces of the barrel are lapped optically flat for precise abutment and full engagement with the mating components. Write: Control Data Worldtech, Inc., 474 Concordia Avenue, St. Paul, Minnesota 55103 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402, U.S.A.

entier, par pays, à l'exception des États-Unis. Deux formules peuvent s'appliquer à ces injecteurs économisant le carburant et destinés aux moteurs diesel Cummins: entreprise commune ou droits de licence exclusifs par pays en échange d'un paiement initial plus des redevances. Le nécessaire comprend un cylindre et un piston pour injecteurs de carburant types D et K montés sur les moteurs diesel Cummins. Des essais ont révélé que ces cylindres et pistons améliorés pouvant réduire la consommation de 15 à 20 pour cent, diminuer la pollution de 23 pour cent et accroître la puissance de 6 à 8 pour cent. Les cylindres et les pistons du nécessaire et les pièces d'origine sont interchangeables et le moteur n'exige aucune modification. Les nécessaires conviennent à tous les moteurs diesel Cummins munis d'injecteurs types D ou K; ils peuvent donc se monter dans les véhicules routiers, les groupes électrogènes, les navires, le matériel lourd, etc. Tous les passages de carburant de l'injecteur sont formés sans ouverture vers l'extérieur. Le passage de distribution du carburant de l'injecteur est doté d'un siège forgé sur lequel s'appuie le clapet de retenue à bille, siège dont on garde la profondeur à 0,0254 mm pour obtenir un fonctionnement sans vibration et une fermeture complète. La lumière de refoulement du carburant a la forme d'un rectangle, ce qui permet d'améliorer l'écoulement du carburant. Les bouts du cylindre sont rodés dans un plan optique, ce qui permet un montage bout-à-bout précis et un emboîtement complet avec les éléments appariés. Écrire à: Control Data Worldtech, Inc., 474 Concordia Avenue, St. Paul, Minnesota 55103 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 15 South Fifth Street, Minneapolis, Minnesota 55402 (É.-U.).

Indicator for Measuring Hardening of Unsaturated Polyester Resins/303

Hungarian licensing organization offers technology which temporarily introduces an intense colour to mixtures of polyester resin, organic peroxide initiators and catalysts. The colour fades and finally disappears as the cross-linking reaction progresses. This allows the progress of the reaction to be monitored visually and the resin removed from the mould when the required hardness is attained. This allows for a greater utilization of equipment. Unreacted portions of the resin remain coloured, indicating repair. No new equipment is required to utilize this technology. Write: Licencia, P.O. Box 207, H 1368 Budapest, Hungary and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Budakeszi ut 55/dP/8, 1021 Budapest, Hungary.

Indicateur du degré de durcissement de résines de polyester insaturé/303

L'organisme hongrois responsable de l'octroi de licences offre aux compagnies canadiennes les droits d'exploitation d'une méthode permettant de suivre visuellement une réaction de polymérisation en ajoutant à des mélanges de résines de polyester, d'activeurs à base de peroxydes organiques et de catalyseurs un colorant intense qui disparaît au fur et à mesure que progresse la réaction de polymérisation, puis qui devient totalement incolore lorsque le monomère est épuisé. Ainsi, on peut procéder au démoulage lorsque le degré de durcissement voulu a été atteint. On peut donc mieux tirer profit du matériel dont on dispose. La fraction du mélange non polymérisée reste colorée, indiquant ainsi qu'il faut effectuer des réparations. Cette méthode ne requiert aucun matériel nouveau. Écrire à: Licencia, C.P. 207, H 1368 Budapest (Hongrie) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Budakeszi ut 55/dP/8, 1021 Budapest (Hongrie).

Biopreparation for Protecting Sprouting Sugar Beet Against Rot and Method of its Production/303

Czechoslovakian Foreign Trade Corporation offers the licensing rights to a Canadian company for a newly developed biological preparation in powder form which can be used in current disinfecting tanks and, simultaneously,

Préparation biologique pour la protection des pousses de betteraves sucrières contre la maladie du pied noir et méthode de production de la préparation/303

La Corporation du commerce étranger de Tchécoslovaquie offre à une société canadienne la licence d'exploitation d'une préparation biologique, sous forme de poudre, récemment mise au point qui peut servir à la désinfection

can also be spread by all types of sowing machines to combat wide spread rot in sprouting sugar beet. The method of combatting beet rot by preventive methods, i.e., by chemical treatment of the seed is based on the mycoparasitic properties of the micromycetum Pythium oligandrum Drechsler. This mycoparasite is a natural inhabitant of beet-growing soils, i.e., there is no introduction of a new organism from a different ecotype into the soil. The active components of this preparation are the oospores of the mycoparasite which has been cultivated in suitable media. The biopreparation acts against pathogenous micromycetums which cause both pre-emergent and post-emergent phases of the disease. The preparation is not harmful to humans. The mycoparasite germs do not accumulate in the soil: soon after completion of their function as a protection against beet rot, biological equilibrium between the microorganisms is restored after its temporary disruption by the introduction of the strong inoculation potential of the mycoparasite. The biopreparation has been tested under hot-house and field conditions; the results were favourable although it acts only as a fungicide. The production of the preparation is technically not exacting. The technology has been elaborated in detail and can be applied in large-scale production. 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.

des cuves et être simultanément épandue par tous les types de semeuses afin de lutter contre l'infection généralisée des pousses de betteraves sucrières par la maladie du pied noir. Cette méthode préventive de lutte contre la maladie, c'est-à-dire par le traitement des semences, est basée sur le parasitisme du micromycète *Pythium oligandrum* Drechsler. Le mycoparasite utilisé est un habitant naturel des sols utilisés pour la culture des betteraves, il n'y a donc pas introduction dans le sol d'un nouvel organisme d'un écotype différent. Les composantes actives de la préparation sont les oospores du mycoparasite qui peut être cultivé sur milieu approprié. La préparation agit contre les micromycètes pathogènes qui sont responsables des stades de pré et de post-émergence de la maladie. Elle n'est pas nocive pour l'homme. Les germes du mycoparasite ne s'accumulent pas dans le sol. L'équilibre biologique entre les micro-organismes du sol temporairement modifié par l'important inoculum du mycoparasite revient rapidement à la normale une fois que le mycoparasite a joué son rôle protecteur contre la maladie. La préparation biologique a subi des essais en serre chaude et sur le terrain. Les résultats ont été bons bien qu'elle n'agisse que comme fongicide. La production de la préparation n'exige pas un haut degré de précision technique. Les techniques nécessaires ont été mises au point de façon détaillée et peuvent servir à la production à grande échelle. Écrire à: M. Jan Volny, Polytechna, P.O. Box 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).

Canadian Patents Available for Licensing or Sale Issued February 1981

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

Patent 1,094,819

Hydrometallurgical Process for the Recovery of Zinc, Copper, and Cadmium from Their Ferrites/303

A hydrometallurgical process for the recovery of zinc, copper, and cadmium from their ferrites by treating the ferrites under atmospheric conditions in a sulfuric acid-bearing solution in the presence of potassium, sodium, or ammonium ions at 80-105°C in order to precipitate, as jarosite, the iron present in the ferrites, separating a jarosite-bearing solid from the solution, feeding the solution to a neutral leach stage, to which acid and calcine are also fed and from which a solution containing zinc, copper, and cadmium is recovered and feeding the ferrite-bearing solid to the ferrite treatment stage, and recycling a portion of the jarosite-bearing solid obtained from the ferrite treatment stage to the process. Write: Outokumpu Oy, Outokumpu, Finland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Pohjois Esplanadi 25B, 00100 Helsinki 10, Finland.

Patent 1,094,873

Green Wheat Processing Inot Edible Cooking Ingredient/303

Wheat is commonly harvested when the ears are dry and ameanable for threshing and when the grains are hard and ripe for processing into flour or meal and for animal feeding. In this invention the ears are harvested green when the kernels reach the full grain size while still being green, soft and difficult to thresh from the ears. Baking the green ears in conventional ovens roasts the husk, dries and hardens the green kernels which are then easily threshed clean from the roasted husk. The green wheat so produced is an edible cooking ingredient and compatible substitute for rice and wild rice in all their relevant recipes. Write: Sami S. Nosseir, 3, 11th Street, Port-Cartier, Quebec G5B 1L2 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.

Patent 1,094,906

Cigarette Extinguisher/303

L'invention concerne un dispositif extincteur de cigarettes fixé sur le rebord d'un cendrier. Le dispositif comporte deux lames pivotées entre leurs bouts sur un axe commun monté sur le rebord du cendrier, chacune munie d'un tranchant permettant de couper le bout d'une cigarette, des moyens pour rappeler les lames dans une position ouverte, et un couvercle recouvrant les tranchants et muni d'un trou dans lequel la cigarette peut être insérée pour être tranchée par les tranchants des deux lames. Celles-ci sont actionnées en les serrant par exemple entre le pouce et l'index, ce qui permet de se servir de l'autre main pour tenir la cigarette que l'on veut éteindre, étant donné qu'il n'est pas nécessaire de retenir le cendrier. Écrire: Antonio Franchellini, 2731, avenue Ste-Hélène, Longueuil, Québec J4K 3V5 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 1,094,983

Capped Fuel Tank Funnel/303

A funnel adapted to be screwed to the filling opening of the fuel tank of snowblowers, lawn-mowers, outboard motors and the like engine-operated equipment. The funnel is provided with a cap, in turn having an air intake opening with an air filter. The funnel is thus always accessible for filling the tank. Write: Gaston Guglia, 10, 227 de la Roche Street,

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

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

Brevet 1,094,819

No translation available/303

Brevet 1,094,873

No translation available/303

Brevet 1,094,906

Extincteur de cigarettes/303

Brevet 1,094,983

No translation available/303

Montreal, Quebec H2C 2P2; Jacques Lupien, 744 Camille Street, Fabreville (Laval), Quebec H7P 2Z7 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.

Patent 1,095,315

Ground Working Implement/303

Brevet 1,095,315

No translation available/303

A plurality of ground working sections such as cultivator sections, are flexibly connected together and operatively connected to a hitch pole assembly. Each section is supported upon a pair of castor wheels mounted on a fore and aft beam pivotally connected to the front and rear of the frame members. The sweeps or cultivators move in an arc via hydraulic or mechanically operated rock shafts and the depth control is by means of controlling the pivotal movement of the fore and aft beams. This also permits the penetration angle of the sweep or cultivator to be preset and maintained. For transport, the draw pole is raised and the implement is towed by one end thereof with the castor wheels automatically aligning with the direction of travel thus eliminating folding or raising of sections and permitting practically any length of cultivator or ground working implements to be assembled. Write: Pete Repski, Craik, Saskatchewan S0G 0V0 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.

Patent 1,095,361

Baffle for Gas Heater Vents/303

Brevet 1,095,361

No translation available/303

This invention is an enclosure for the part of a gas heater vent which protrudes on the outside of a wall of the building in which the gas heater is installed. It consists of a sheet metal rectangular baffle which encloses the front, sides, and part of the top of the vent part, and is attached to the wall of the building. A variation of the invention provides for the easy removal and reattachment of the baffle; and another variation fully encloses the top and bottom of the baffle, provides a chimney for the discharge of gasses at the top of the baffle, and a rain and snow shield for the top of the chimney. Write: Lawrence J. Pieschke, P.O. Box 171, Woodslee, Ontario N0R 1V0 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.

Patent 1,095,388

Determination of Polyunsaturated Fat Levels in Body Fluids/303

Brevet 1,095,388

Dosage des lipides polyinsaturés dans les liquides organiques/303

A method of determining the polyunsaturated fatty acid levels in a body fluid such as serum or plasma includes the steps of converting the polyunsaturated fatty acid content of a sample of body fluid into free acid or salt form, taking a predetermined volume of this body fluid, oxidising the polyunsaturated fatty acids or salts in the volume of body fluid with molecular oxygen in the presence of excess of an oxygenase enzyme which is specific for polyunsaturated fatty acids which contain a cis,cis-1,4-pentadiene system in a suitable buffer, and measuring the amount of oxygen consumed by the volume of body fluid by means of an oxygen electrode. A reagent for use in the above method comprises a borate buffer of molarity 0,1 to 2 molar and pH 7 to 10 and contains an oxygenase enzyme which is specific for polyunsaturated fatty acids containing a cis, cis-1,4-pentadiene system. Write: Chembro Holdings (Proprietary) Limited, 105 Quartz Street, Hillbrow, Johannesburg, Transvaal, South Africa and send a copy of your initial correspondence to Canadian Embassy, P.O. Box 26006, Arcadia, Pretoria 0007.

Patent 1,095,449

Grain Bin Auger Assembly/303

Brevet 1,095,449

No translation available/303

A horizontal main auger assembly is provided, in the preferred embodiment, with a pair of shorter horizontal auger assemblies, the first being pivoted to the end of the main auger assembly for swinging movement in a horizontal plane and the second being pivotally secured to the distal end of the first shorter auger assembly also for swinging movement in a horizontal plane. A vertical pick-up auger assembly depends downwardly from the distal end of the second shorter auger assembly. All auger assemblies are driven by hydraulic motors and the two shorter auger assemblies are pivoted by hydraulic orbital motors. The actuation of the two shorter auger assemblies allows the pick-up assembly to cover all of the floor area of a grain bin. One alternative construction contemplates the use of only one shorter auger assembly and another alternative construction has the pick-up auger assembly connected directly upon the end of the main auger assembly. Write: John W. Price, Box 354, Moose Jaw, Saskatchewan S6H 4N9 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.

Patent 1,095,596

High Temperature Magnetic Refrigerator/303

A high temperature magnetic refrigerator which uses a Stirling-like cycle in which rotating magnetic working material is heated in zero field and adiabatically magnetized, cooled in high field, then adiabatically demagnetized. During this cycle said working material is in heat exchange with a pumped fluid which absorbs heat from a low temperature heat source and deposits heat in a high temperature reservoir. The magnetic refrigeration cycle operates at an efficiency 70% of Carnot. 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 1,095,596

No translation available/303

Patent 1,095,607

Microwave Ice Detector/303

The present invention relates generally to surface ice detection systems, and, more particularly, to ice detectors for use in aircraft. Various techniques have been employed in the past for the detection of ice, but have all proved unreliable for one reason or another. One prior art method utilizes forward facing orifices, the formation of ice on the orifices being detected as a decrease in pressure. Other ice detection techniques depend on the detection of a variation in a particular mechanical or electrical parameter. While some of these techniques may operate reasonably satisfactorily on fixed-wing aircraft, there are additional problems posed by the detection of ice on helicopters. Many of the prior art techniques are incapable of being adapted for use on rotating surfaces. Consequently, no satisfactory method has heretofore been available for the detection of ice on helicopter rotor blades. The present invention provides a system for detecting ice on exterior surfaces of aircraft by transmitting a microwave electromagnetic signal into a dielectric layer functioning as a surface waveguide, and monitoring the signals transmitted into and reflected from the waveguide. The waveguide includes a termination element which is mismatched with the waveguide impedance, resulting in partial or total reflection of the microwave energy from the remote end of the waveguide. As ice builds up on the surface waveguide, the impedance or reflection characteristics of the composite waveguide comprising the ice layer and the permanent surface waveguide give a reliable indication of the presence and location of the ice. Write: System Development Corporation, 2500 Colorado Avenue, Santa Monica, California 90406 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

Brevet 1,095,607

Détecteur de glace à micro-ondes/303

Patent 1,095,634

High Voltage Electric Switch/303

This invention provides a compact high voltage self triggered electric switch having a fast switching time. The switch comprises two spaced-apart main electrodes defining a breakdown gap, two trigger electrodes each of which is directly electrically connected to different ones of the main electrodes, the geometry of the trigger and the main electrodes being such that the breakdown voltage between the trigger electrodes is less than the breakdown voltage between the main electrodes, with the trigger electrodes being adapted to generate electrically electromagnetic radiation which irradiates a substantial portion of an insulating gas in the breakdown gap, the radiation being of a sufficiently high intensity to cause substantial photo electric emission of electrons in the gas and thus breakdown of the gas and an electrical discharge between the main electrodes. The trigger discharge preferably occurs across a surface of a radiation enhancing member. Write: The South African Inventions Development Corporation, Administration Building, Council for Scientific and Industrial Research, Scientia, Pretoria, Transvaal, South Africa and send a copy of your initial correspondence to Canadian Embassy, P.O. Box 26006, Arcadia, Pretoria 0007.

Brevet 1,095,634

No translation available/303

Patent 1,095,748

High Strength, High Ductility Low Carbon Steel/303

A high strength, high ductility low carbon steel consisting essentially of iron, 0.05-0.15 wt% carbon, and 1-3 wt% silicon. Minor amounts of other constituents may be present. The steel is characterized by a duplex ferrite-martensite microstructure in a fibrous morphology. The microstructure is developed by heat treatment consisting of initial austenitizing treatment followed by annealing in the $(\alpha+\gamma)$ range with intermediate quenching. The present duplex steel has particular advantages for the automotive/pipeline industries. 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 1,095,748

Acier à faible teneur de carbone, à ductilité élevée et à haute résistance/303

Patent 1,095,808

Folding Car Top Camper/303

Brevet 1,095,808

No translation available/303

In a folding car top camper it is known to have a rectangular base to which four sides are hinged and having a flexible top which is secured to the top edge of the two longer sides. In this invention the two longer sides form a relatively strong top when the camper is folded. The two shorter sides support a ridegepole and the ends of the roof when in the erected position. The top automatically comes into roof position when the sides and ridgepole are set up and the top automatically folds into proper storage position when the sides are folded into position for storage or travelling. One end has an opening in it to allow a person to enter or exit. This opening may be fitted with a conventionally hinged door or any other suitable closure such as a weatherproof drape. The camper is mounted on the roof of the associated vehicle by means of conventional heavy-duty roof racks or roof racks specifically designed for this purpose. Write: Leslie N. McGowan, 2435 Chicoutimi Drive, Calgary, Alberta T2L 0W2 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.

Patent 1,096,006

Door Guard and Intruder Alarm/303

Brevet 1,096,006

No translation available/303

This door guard acts to prevent a door being forceably opened inwardly into a room. It consists of a removeable brace attached to the door at the top by a bracket, and to the floor or door frame at the bottom by an adjustable linkage. If the door moves slightly in the entry attempt the door guard emits an audible warning signal. The guard can be used in a portable mode for other doors. Write: Truman B. Landon, 445 East Mile Road, London, Ontario N6H 3K4 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.

Patent 1,096,033

System and Method for Residual Tire Life Prediction by Ultrasound/303

Brevet 1,096,033

Dispositif pour déterminer ultrasoniquement la durée de vie résiduelle d'un pneu/303

A system preferably a pulse echo reflection system, for residual tire life prediction by ultrasound includes: a transmitter transducer; means to provide pulses of electrical energy to the transmitter transducer, that converts the electrical pulses into pulses of ultrasonic vibrations and transmits them into an area of the ply-containing portion of the carcass of a tire, having a number of plies in the carcass, to be tested; clock means to control the frequency of the electrical pulses; a receiver transducer mounted relative to the transmitter transducer to receive ultrasonic energy reflected by the tire; amplifier means connected to the receiver transducer to receive reflected ultrasonic energy from different levels within that portion of the carcass of the tire, including reflected ultrasonic energy from plies of the carcass of the tire; processing means having an input connected to the amplifier; and gate means responsive to the clock means to provide, after a delay following each electrical pulse, a time-gated signal from the output of the amplifier means to the input of the processing means that, for each ultrasonic pulse to the tire, includes only the amplified signals corresponding to the reflected ultrasonic energy from a level adjacent but outwardly of the outermost ply of that portion of the carcass of the tire to a level inwardly of at least the outermost ply of that portion of the carcass. The processing means is constructed to provide a signal indicative of ply degradation or separation based on the time-gated signal. Write: Gard, Inc., 7449 N. Natchez Avenue, Niles, Illinois 60648 and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

Patent 1,096,068

Process for Complete or Selective Removal of Salts from Aqueous Solution/303

Brevet 1,096,068

No translation available/303

A process by which salts are removed or recovered from an aqueous solution by means of a polyether, by contracting the aqueous solution with active carbon impregnated with a cyclic or linear polyether, and then eluting ether and salt successively from the carbon. The aqueous solution of salts may be passed through a column packed with the active carbon impregnated with a polyether. The polyether may be recovered from the carbon by elution with a non-polar or slightly polar water-immiscible organic solvent, and the salt(s) may then be recovered by elution with water. Write: Johannes Dale, Stasjonsveien 63, 1310 Blommenholm, Norway; Gerd Borgen, Grinda 4, Oslo 8, Norway and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Postuttak, Oslo 1, Norway.

Brevet 1,096,215

Câble optique de télécommunication/303

Câble optique de télécommunication permettant d'obtenir un grand nombre de conducteurs optiques sous un faible encombrement comportant des conducteurs optiques disposés dans des tubes hexagonaux d'éléments-rubans obtenus par le soudage de deux rubans en aluminium de faible épaisseur revêtus sur une face de polyéthylène sur lesquels on imprime des reliefs trapézoïdaux. Les éléments-rubans sont collés ensemble et forment une structure matricielle rectangulaire laquelle par l'adjonction de rubans compressibles prend une forme circulaire. La structure circulaire comporte un gainage renforcé de porteurs pour former un toron. Une pluralité de torons constitue un câble. Écrire: Les Câbles de Lyon, 170, avenue Jean-Jaurès, 69353 Lyon Cédex 2, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Patent 1,096,215

No translation available/303

Patent 1,096,412

Holding Member and Process for the Production Thereof/303

Holding members for engaging the corners of base plates of nail plates while wooden beams are forced down on the upwardly projecting nails to form a truss are made of resilient plastics material of about the same thickness as the base plate and provided with a self-adhesive surface for fixing them relatively to a preparation table. Each holding member is formed at one side so as to lie against the edge of the base plate at at least two points respectively on both sides of the associated corner. A comparatively thin supporting layer of harder material may be secured on the upper surface or between or on both faces of the resilient material. Write: Lega-Norm AG, Feldstrasse 31, 8400 Winterthur, Switzerland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Kirchenfeldstrasse 88, 3005 Berne, Switzerland.

Brevet 1,096,412

Élément support et méthode de fabrication/303

Brevet 1,096,456

Bloc de connexion électrique à circuits multiples/303

Bloc de connexion électrique à circuits multiples. Ce bloc comprend une embase portant des rangées parallèles de queues de contact parallèles entre elles, et qui présentent des extrémités libres faisant saillie d'un côté de l'embase. Cette embase porte de part et d'autre en bout de celle-ci et à une certaine distance deux flasques en matériau isolant parallèles aux queues de contact perpendiculairement aux rangées et séparés latéralement des queues de contact situées aux extrémités des rangées. Pour chaque rangée, il y a un groupe de fiches aboutissant du côté des contacts et s'étendant chacune entre les flasques pour maintenir des conducteurs destinés à être connectés aux extrémités libres des queues de contact. Les flasques sont ajourés en forme de dents. Les extrémités des fiches sont assemblées entre les extrémités des flasques, de façon à définir des goulottes de filerie aux extrémités des rangées des queues de contact pour permettre aux conducteurs de s'étendre entre les flasques. Ce bloc est caractérisé en ce que les fiches sont suffisamment espacées de l'embase pour que les queues de contact aient une grande longueur libre permettant la connexion des conducteurs à leurs queues de contact respectives, les fiches étant supportées par des portions s'alignant avec les dents. Selon une réalisation particulière un capot est prévu. Ce capot comprend deux parties assemblées par vis et qui permettent la pose du capot après la connexion des fiches. Écrire: CGEE Alsthom S.A., 13, rue Antonin-Raynaud, 92309 Levallois-Perret, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Patent 1,096,456

No translation available/303

United States Government Patent Applications Available For U.S. and Possibly Foreign Licensing

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NTIS
Mr. George Kudravetz
Product Manager
U.S. Department of Commerce
National Technical Information Services
5285 Port Royal Road
Springfield, Virginia 22161

Navy
U.S. Department of the Navy
Assistant Chief for Patents
The Office of Naval Research
Mailing Code: 302
Arlington, Virginia 22217

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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-6-171 625

Log Handling Machine/303

Filed July 23, 1980, by the Department of Agriculture. This invention relates to timber harvesting apparatus, and more particularly to a swinging boom log skidding and loading attachment for a bulldozer or similar vehicle. Write: NTIS.

Machine de manipulation des grumes/303

PAT-APPL-6-171 626

Dyeing of Cellulose-Containing Textiles in Glycol and Glycol Ester Solvents/303

Coloration de textiles à base de cellulose, dans du glycol et des esters de glycol/303

Filed July 23, 1980, by the Department of Agriculture. The dyeing of cotton in glycol and glycol ester solvents containing direct or sulfur dyes is disclosed. Prior to dyeing, the fabric is treated with an aqueous solution to swell the fibers. When the pretreated cotton is dyed in solvent containing 0.25% to 2% potassium thiocyanate it results in improved colour saturation. The instant invention is extremely effective for either cotton or cotton/polyester blends. Write: NTIS.

PAT-APPL-6-171 627

Method of Preparing Citrus Fruit Sections with Fresh Fruit Flavor and Appearance/303

Méthode de préparation de quartiers d'agrumes au goût et à l'aspect de fruit frais/303

Filed July 23, 1980, by the Department of Agriculture. A method of preparing citrus fruit sections with a fresh fruit flavor and appearance is disclosed. Thick albedo type grapefruit and oranges are cleaned and heated to a core temperature of about 20 to 40C. They are subsequently scored to the juicy portion, vacuum infused with a commercial pectinase, incubated for critical time and temperature periods, and peeled. The resultant high quality fruit is stored in refrigeration. Write: NTIS.

PAT-APPL-915 709

Backlash Filter Apparatus/303

Filtre backlash/303

Filed June 15, 1978, by the Department of the Air Force. A backlash filter apparatus for the removal of spurious electrical components of a pre-established amplitude level from a voltage signal. The filter apparatus provide a backlash window to which the input signal comprising a desired signal and its spurious noise component is applied. The spurious noise component is removed in the backlash window, thus providing a filter-free filter output. Write: NTIS.

PAT-APPL-6-128 345

Wide Range Multiple Time Mark Generator/303

Générateur marqueur à sorties multiples et à gamme étendue/303

Filed March 7, 1980, by the Department of the Air Force. A time pulse generator producing selectively, singular or multiple output pulses over a range from 1 sec to 10 seconds with provision for preselected reset. Additional features include an output for all pulses, an output increasing as the sum of the number of output pulses increase, and a blanking output pulse adapted to control the duration of a cathode ray-beam in an oscilloscope application. Write: NTIS.

PAT-APPL-6-160 260

Multilayer Extender Board/303

Carte d'extension à couches multiples/303

Filed June 17, 1980, by the Department of the Air Force. A multilayer printed circuit extender board of the printed wire type adapted for use as a replacement for a typical prior art, double-sided, single layer extender board of the printed wire type which has an upper surface with a plurality of printed wires thereon, and has a lower surface with a plurality of corresponding printed wires thereon, and also has inherent undesired interwire capacitive coupling resulting when in use. The multilayer printed circuit extender board isolates the upper and lower printed wires by a ground plane, and also separates adjacent printed wires by grounds interposed there between, and thereby eliminates all interwire capacitive coupling. Write: NTIS.

PAT-APPL-6-162 555

Optical Fringe Analysis/303

Analyseur de franges optique/303

Filed June 24, 1980, by the Department of the Air Force. An apparatus for measuring in-plane surface displacement utilizing speckle diffraction interferometry. A double exposure specklegram is incrementally illuminated with a narrow laser beam. The diffraction pattern created upon passing through the specklegram strikes a mask having a variable transparency pattern covering a range of spatial frequencies. The correlation of the diffraction pattern and mask pattern projects through the mask and is optically integrated along lines of constant spatial frequency. The intensity of the luminous energy line created thereby represents the degree of correlation. The peak intensity, as measured by a calibrated linear detector array, corresponds to the spatial frequency of that point on the specklegram and the surface displacement between speckle recordings. Orientation of the displacement at each specklegram increment is obtained by using a dove prism to rotate diffraction pattern until a maximum spatial frequency is observed. Write: NTIS.

PAT-APPL-6-169 056

Electrostatic Free Electron Laser/303

Laser électronique exempt d'électrostatique/303

Filed July 15, 1980, by the Department of the Air Force. An electrostatic free electron laser having an electromagnetic waveguide, means to produce a periodic longitudinal electrostatic field along the waveguide and an electron beam which passes through the waveguide. Radiative energy is generated by the laser as a result of the kinetic energy lost by the electron beam as it is decelerated during its interaction with the electromagnetic wave and the electrostatic field within the waveguide. In use as an oscillator, the electrostatic free electron laser includes a resonator either in addition to or instead of the waveguide. Write: NTIS.

PAT-APPL-6-169 231

Signal Compressor Apparatus/303

Compresseur de signaux/303

Filed July 15, 1980, by the Department of the Air Force. A signal compressor apparatus utilizing a charge coupled device having a charge storage well wherein the charge storage capacity is variable over the integration time of the device. During the minimum charge storage period, the input charge which exceeds an established limit is dumped, thereby providing compression of the input signal. Write: NTIS.

PAT-APPL-6-171 612

Digital Voice Conferencing Apparatus in Time Division Multiplex Systems/303

Appareil de téléconférence vocale numérique utilisant un système de multiplexage par répartition dans le temps/303

Filed July 23, 1980, by the Department of the Air Force. A digital voice conferencing apparatus utilizing a time division multiplex system to process data packets from and to the participants of the conference call. The subscribers and the conference call originator utilizes a time division multiplex (TDM) adapter to establish a conference call mode, to identify the members thereto, and to provide all the means for transmitting and receiving the voice packets to the conference members excepting each members own voice packet. A digital voice conferencing apparatus is located at each subscriber location and permits all subscribers who may be talking simultaneously to be understood. Write: NTIS.

PAT-APPL-6-171 614

Coherent Optical Feature Identifier Apparatus/303

Appareil d'identification à système optique cohérent/303

Filed July 23, 1980, by the Department of the Air Force. A coherent optical feature identifier apparatus utilizing an optical data gathering system in conjunction with a digital data correlator unit to recognize uninterpretable features on photographs. A dual visual display is utilized to compare a desired feature with the Fourier transform correlation from the comparator storage unit. Write: NTIS.

PAT-APPL-6-171 913

Programmable Synchronous Digital Delay Line/303

Ligne à retard numérique, synchrone et programmable/303

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed July 23, 1980, by the Department of the Air Force. This application describes a synchronous digital delay line that can be programmed by variable delay increments to independently delay the leading and trailing edges of a digital signal and that can be utilized to provide a wide range of digital delaying requirements. Write: NTIS.

PAT-APPL-906 186

Prestressed Article/303

Article précontraint/303

Filed May 15, 1978, by the Department of the Army. Thermoforming, utilized for making articles from sheets of thermoplastic resins, does not readily yield articles having desired strength properties. Using both thermoplastic and thermosetting resins in the process results in articles embodying fabrication stresses akin to those in prestressed concrete. Write: NTIS.

PAT-APPL-906 187

Bonding Plastic Layers/303

Méthode de liaison de couches de plastique/303

Filed May 15, 1978, by the Department of the Army. By the practice of this invention thermosetting materials such as weft layers of fibers of glass, steel, kevlar, graphite, or polyamide fibers impregnated with epoxy resins can be employed in thermoforming operations to improve the strength properties of the molded article. It has been found that if the epoxy resin is partially cured during the thermoforming operation the resulting layers are securely bonded together, i.e., fused, in the formed article. The sheet of epoxy resin impregnated weft is placed on the mold. The heated thermoplastic sheet is then lowered onto the epoxy resin sheet. Partial curing takes place as the layers are drawn over the mold to effect a strong bond between the thermoplastic and thermoset layers in the resulting article. The epoxy can subsequently be post cured if necessary. So long as the post cure temperature does not exceed the heat distortion temperature of the thermoform material. Write: NTIS.

PAT-APPL-6-052 300

Automated Exposure — Contrast Control Index Meter/303

Appareil permettant de mesurer automatiquement l'exposition et l'indice de contraste/303

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed June 26, 1979, by the Department of the Army. This invention pertains to an apparatus and method for determining a film development parameter and a camera exposure setting to compensate for the luminous dynamic range of a subject being photographed. In a semi-automatic embodiment, information corresponding to desired film densities for two areas of the subject matter is manually inputted to the apparatus, which is then pointed towards the two areas. In an automatic embodiment, information corresponding to desired film densities for the brightest and least bright areas of the subject to be photographed is manually inputted, the entire subject is automatically scanned by a vidicon or equivalent means, and the brightest and least bright areas of the subject are automatically detected. Write: NTIS.

PAT-APPL-6-084 965

Temperature Responsive Device/303

Dispositif sensible à la température/303

Filed October 15, 1979, by the Department of the Army. The present invention relates to temperature responsive devices and in particular to containers having meltable bodies therein. It is desirable to have a thermally responsive device which can actuate electrical, fluidic or mechanical devices. In addition it is desirable to have a simple thermal device which provides a visual indication of whether a predetermined temperature has been exceeded. It is also desirable that the thermal device be designable to operate reversibly or irreversibly. In accordance with the illustrative embodiments demonstrating features and advantages of the present invention there is provided a temperature responsive device. This device includes a container and a meltable body partially filling the container. This meltable body is meltable at a predetermined temperature. The temperature responsive device also includes an actuating member arranged to translate through the container and displace the meltable body upon its melting. Write: NTIS.

PAT-APPL-6-087 114

Induction Heating or Ion Plating Induction Heating Calcium Chemical Pump/303

Pompe à calcium à chauffage par induction ou à chauffage par induction et dépôt ionique/303

Filed October 22, 1979, by the Department of the Army. A process for producing a calcium chemical pump which includes providing an evacuated container that has a vacuum pulled thereon and heating calcium with an induction heater to the point of causing the calcium to boil and rise as a vapor and depositing the vapor in the form of calcium on a porous foamed substrate material to load the foamed substrate material with the calcium to provide a calcium chemical pump and further, if desired, applying a potential to the substrate material to cause ion plating of the calcium in the form of finger-like formations on the substrate material to thereby provide greater surface area of the deposited calcium. Write: NTIS.

PAT-APPL-6-108 195

Bi-Orthogonal PCM Communications System Employing Multiplexed Noise Codes/303

Système de communications bi-orthogonales MIC utilisant des codes de bruit multiplexés/303

Filed December 28, 1979, by the Department of the Army. This invention relates to a bi-orthogonal PCM communications system employing multiplexed noise codes to provide enhanced protection against interference. Two system approaches are described — a first of which employs active, matched filter detection, whereas a second of which employs passive matched filter detection. The noise codes employed are of type termed code mates having correction functions which, upon detection, provide an impulse autocorrelation function. The described arrangements afford a transmission efficiently which extends towards Shannon's theoretical limit. Write: NTIS.

PAT-APPL-6-126 516

Frequency Agility Technique for Frequency Scanned Antenna/303

Technique d'évasion de fréquence pour antenne à balayage de fréquences/303

Filed March 3, 1980, by the Department of the Army. In a serpentine feed structure for a frequency scanned antenna a switching network is provided which allows the serpentine to be fed from either end on alternate or random scans. This variable transmission system significantly increases the frequency bandwidth that must be jammed by detrimental countermeasure systems. The feed switching network comprises first, second and third switching circulators coupled to receive radiant energy from a radar transmit-receive switch and selectively couple this energy to one or the other end of a serpentine feed structure for controlling the direction of electromagnetic radiation energy coupled through the serpentine structure. The serpentine feed structure supplies radiant energy to an antenna array of a frequency scanned antenna for controlling the sector scanning of the antenna. Reversing the direction of energy flow through the serpentine causes a change in the particular frequencies scanning a given sector of the scan. This allows two separated frequencies to be alternately used for directing a beam toward a particular direction thereby reducing the effects of countermeasure systems. Additionally, energy reflected from a target may be coupled back through the array and switching network to the radar transmit-receive circuitry. Write: NTIS.

PAT-APPL-6-133 173

Electromagnetic Interference Suppression in a Vehicle Horn Circuit/303

Suppression du brouillage électromagnétique dans le circuit klaxon des véhicules/303

Filed March 24, 1980, by the Department of the Army. In a military vehicle having an electric horn actuator circuit, the improvement comprising the addition of a capacitor in the circuit at a location between a brush and contact ring assembly disposed wihtin the vehicle steering column. The capacitor is electrically located in close connection to the brush-contact ring interface to respond effectively to voltage/current surges initiated at the brush-contact ring interface. The capacitor can be installed in existing vehicles in a retrofit operation. Write: NTIS.

PAT-APPL-6-134 858

Video Tracker/303

Dispositif de poursuite vidéo/303

Filed March 28, 1980, by the Department of the Army. This invention relates to an electrical control system for a video tracker, including circuitry for maintaining the size of the target substantially constant relative to the tracking window, thereby improving the accuracy of the target shift detection circuit. Additional circuitry is provided for enhancing contrast between the target and the background scene, thus preventing loss of the target due to inadvertant sensing of grey clutter instead of the true target. Write: NTIS.

PAT-APPL-6-137 641

Direct Conversion Analog to Digital Converter/303

Convertisseurs analogique/numérique à conversion directe/303

Filed April 7, 1980, by the Department of the Army. A four bit subtractor analog to digital converter provides direct conversion of analog voltage signals into binary or binary coded decimal output signals for digital display or digital signal processing. The analog to digital converter utilizes a plurality of signal processing sections, each section being designed to provide a binary output with the composite output bits being indicative of the analog input signal. In processing the analog signal an operational amplifier compares the input analog signal with a reference voltage in each section. Each section either passes or rejects the analog signal input in response to this comparison voltage. If the signal is rejected by a section it is passed to the next section where the same type of comparison takes place, if the signal is accepted by the operational amplifier and operated on, a comparator responsive to the amplifier output changes state providing a binary one output instead of a binary zero. A change in the comparator output signal to a binary one causes a field effect transistor switch to change states thereby supplying the operational amplifier output signal to subsequent signal processing sections instead of the originally supplied analog signal input. Subsequent sections operate in an identical manner with a systematic reduction in the comparison or reference voltage for providing digital signal processing. An amplifier at the end of each signal processing stage operates on the residual analog signal input to that amplifier to prepare the signal for processing in subsequent stages and thereby maintain signal integrity with no loss of signal level. Write: NTIS.

PAT-APPL-6-138 055

Capillary Waveguide Laser with Cooled Porous Walls/303

Laser à guide d'ondes capillaire avec parois poreuses refroidies/303

Filed April 7, 1980, by the Department of the Army. The porous wall of the laser is surrounded by a further porous copper tube. A dense copper wall surrounding the tube and being connected to it periodically along its length by partially open copper washers. Write: NTIS.

PAT-APPL-6-140 345

Travelling-Wave Tube Utilizing Vacuum Housing as an RF Circuit/303

Tube à onde progressive avec chambre sous vide comme circuit RF/303

Filed April 14, 1980, by the Department of the Army. A travelling-wave-tube has a vacuum housing that includes the helix rf circuitry. The helix conductor is intertwined with and hermetically sealed to the insulating material comprising the vacuum housing. Thus, portions of the helix interact with the electron beam in the center of the vacuum housing while other portions are in contact with the atmosphere, thus cooling the helix and permitting the tube to operate at higher average powers. Write: NTIS.

PAT-APPL-6-142 917

Small Broadband Antennas Using Lossy Matching Networks/303

Petites antennes à large bande utilisant des réseaux d'adaptation à pertes/303

Filed April 23, 1980, by the Department of the Army. A low-profile survivable antenna suitable for military use is described. Despite its small size, which might be one tenth of a wavelength, the antenna has reasonable transmission range for these applications. Very little operator attention is needed in operation, since a special matching circuit within the antenna network enables effective impedance matching, over a 3-1 frequency range, without necessity of switching to different matching circuits over different frequency bands. By including resistive components along with other passive inductive or capacitive elements, the reactance of the single matching circuit is made to effec-

tively compensate the antenna's impedance over the entire frequency range. The impedance of the circuit has a decreasing positive reactance which compensates for the decreasing negative reactance, with frequency of the antenna. Write: NTIS.

PAT-APPL-6-145 180

Resonator Configurations for Severe Environments/303

Configurations de résonateurs pour fonctionnement en conditions extrêmes/303

Filed April 30, 1980, by the Department of the Army. An arrangement is disclosed for piezoelectric resonators utilizing linear and parallel sides or flats located on the periphery and opposite ends of the resonator. These sides are located normal to the axes wherein collinear forces applied to the resonator produce a desired effect upon its natural resonant frequency. For mechanical sensor applications this effect is maximized while for applications requiring a stable frequency or time base this effect is minimized. The outline peripheral shape of the resonators utilizing this mounting arrangement varies in accordance with the crystallographic orientation present in each resonator. Write: NTIS.

PAT-APPL-6-146 560

Phase Shifter and Line Scanner for Phased Array Applications/303

Déphaseur et balayeur de ligne pour applications à réseau déphasé/303

Filed May 5, 1980, by the Department of the Army. A millimeter wave line scanner is disclosed providing steered fan-shaped beams from opposite faces at substantially equal angles of a semiconductor waveguide, rectangular in cross section, and having a plurality of equally spaced metallic perturbations or strips disposed on one of the two radiating sides or faces. Different angles of scan are selectively obtained by means of at least one distributed longitudinal PIN diode formed on an adjoining side of the semiconductor waveguide having electrical circuit means coupled thereto for controlling the diode's conductivity which acts to change the guide wavelength and accordingly cause a variation in radiation angle of the two equal beams radiating from opposite faces. The waveguide with one or more PIN diodes may also be used as a phase shifter. To reduce losses, a dielectric insulating layer is disposed between each PIN diode and the waveguide, which prevents the propagation of the wave into the PIN diode. Write: NTIS.

PAT-APPL-6-146 804

Matched High Q, High Frequency Resonators/303

Résonateurs haute fréquence à Q élevé adapté/303

Filed May 5, 1980, by the Department of the Army. The resonator is formed with a primary line which is slightly less than a multiple of a half wavelength long, a tee, and a matching stub. The primary line and the stub are adjustable to make the total length a multiple of one half wavelength. A mechanical length can be connected across the two adjustable lengths so as to maintain a total length of a multiple integral of one half wavelength. Write: NTIS.

PAT-APPL-6-147 778

Method of Chemically Polishing a Doubly Rotated Quartz Plate/303

Technique de polissage chimique d'une plaque de quartz double rotation/303

Filed May 8, 1980, by the Department of the Army. The general object of this invention is to provide a method of chemically polishing a doubly rotated quartz plate. A more particular object of the invention is to provide such a method that will chemically polish a doubly rotated quartz plate whose theta angle is between about 33 deg and 36 deg and whose phi angle is between about 10 deg and 26 deg. A particular object of the invention is to provide a method of chemically polishing an SC-cut doubly rotated quartz plate. Another object of the invention is to provide a method of making quartz plates of great strength suitable for high shock resonator applications. Write: NTIS.

PAT-APPL-6-148 636

Isolation Transformer/303

Transformateur d'isolement/303

Filed May 12, 1980, by the Department of the Army. Multi-Filar Spiral Windings are etched on thin dielectric stock, and then over-encapsulated with the same or similar dielectric material, in the form of a printed circuit wafer suitable for mounting with appropriately shaped cup-core pieces. Write: NTIS.

PAT-APPL-6-149 204

Bonded Grid-Cathode Electrode Structure/303

Structure de cathode à grille intégrée/303

Filed May 12, 1980, by the Department of the Army. A variety of technologies have been applied in the development of a bonded grid cathode. Erosion lithography is used for making the fine-detail grid structure, combining air erosion and lithographic techniques. To obtain openings of the order of 0.001 inch (one mil) or smaller, a nozzle with a high aspect ratio exit opening is used, and the cathode grid structure in scanned. A photo resist in which the grid pattern is develped is used over the molybdenum or tungsten grid film. The metal film is removed from the grid openings by chemical etching. The photo resist over the metal grid is used as a composite mask for removing the BN insulation in the openings by erosion with Al2O3 powder from the special nozzle on the air blast gun. Write: NTIS.

PAT-APPL-6-153 299

Millimeter-Wave Dielectric Waveguide Power Limiter for Self-Oscillating Mixer/303

Limiteur de puissance à guide d'ondes diélectrique pour mélangeur auto-oscillant fonctionnant en ondes millimétriques/303

Filed May 27, 1980, by the Department of the Army. A dielectric waveguide power limiter for a self-oscillating mixer operating on millimeter-wave frequencies. The limiter includes a high resistivity silicon dielectric waveguide and a Gunn oscillator. A plurality of dielectric resonators each including a high uniaxial anisotropy ferrite sphere embedded therein are positioned between the power input end of the waveguide and the Gunn oscillator. Write: NTIS.

PAT-APPL-6-155 347

A Power Measuring Device for Pulsed Lasers/303

Dispositif de mesure de puissance pour lasers pulsés/303

Filed June 2, 1980, by the Department of the Army. There is a problem in measuring the power output of laser beams. For example, a highly intense laser beam may over saturate and destroy known energy detectors and power meters with the exception of large heat sink spherical calorimeters which totally blocks the beam. When the beam energy was spread over a large area, the ratio of the area of the beam to the detector area was so large that accurate and reliable power measurements could not be made due to inhomogeneities in the beam. The device of the present invention accurately and reliably measures the beam power without blocking the beam. The apparatus for measuring the power of a laser beam includes an open ended tube through which the beam passes to expand air or gases in the tube. A pressure transducer is connected to the tube to give an indication of the pressure of the expanded air or gases in the tube. Write: NTIS.

PAT-APPL-6-159 730

Noise Reduction in Engine Exhaust/303

Réduction du bruit des échappements de moteur/303

Filed June 16, 1980, by the Department of the Army. A noise reduction mechanism for an engine, especially effective during idling and operation at low RPM, is disclosed. Under those conditions, engine exhaust noise often represents a predominant part of the total vehicle noise. The noise reducing mechanism comprises a flow-throttling element that substantially closes the main exhaust passage when the engine is in the low-speed range; the exhaust gas and noise is forced to flow through a more effective muffling device to reduce the noise at the exit end of the system. At high engine speeds, the throttling mechanism is deflected to a maximum flow condition for avoidance of undesired back pressure in the exhaust system. Write: NTIS.

PAT-APPL-6-192 261

Triple-Beam Offset Parabaloidal Antenna/303

Antenne paraboloïdale à décalage et triple faisceau/303

Filed September 30, 1980, by the Department of Commerce. A triple-beam offset paraboloidal antenna minimizes the offset of each of three antenna feeds from the focal point of the paraboloid to thereby minimize beam aberrations, while at the same time maximizing the beam steering capability of the antenna. Three beams are produced, two being in mutually orthogonal planes. The axis of the third beam corresponds to the intersection of the orthogonal planes. The antenna in accordance with the present invention finds particular utility in the measurement of three dimensional wind profiles employing doppler radar techniques. Write: NTIS.

PAT-APPL-6-100 754

Preparation and Uses of Amorphous Boron Carbide Coated Substrates/303

Préparation et utilisation de substrats recouverts de carbure de bore amorphe/303

Filed December 5, 1979, by the Department of Energy. Cloth is coated at a temperature below about 1000 exp 0 C with amorphous boron-carbon deposits in a process which provides a substantially uniform coating on all the filaments making up each yarn fiber bundle of the cloth. The coated cloths can be used in the as-deposited condition for example as wear surfaces where high hardness values are needed; or multiple layers of coated cloths can be hot-pressed to form billets useful for example in fusion reactor wall armor. Also provided is a method of controlling the atom ratio of B:C of boron-carbon deposits onto any of a variety of substrates, including cloths. Write: DOE.

PAT-APPL-6-101 363

Method of Preparing Corrosion-Resistant Ceramic Shapes/303

Technique de préparation de formes en céramique résistant à la corrosion/303

Filed December 7, 1979, by the Department of Energy. Ceramic shapes having impermeable tungsten coatings can be used for containing highly corrosive molten alloys and salts. The shapes are prepared by coating damp green ceramic shapes containing a small amount of yttria with a tungsten coating slip which has been adjusted to match the shrinkage rate of the green ceramic and which will fire to a theoretical density of at least 80% to provide an impermeable coating. Write: DOE.

PAT-APPL-6-105 338

Annealed CVD Molybdenum Thin Film Surface/303

Surface à couche mince de molybdène recuit/303

Filed December 19, 1979, by the Department of Energy. Molybdenum thin films deposited by pyrolytic decomposition of Mo(CO) sub 6 attain, after anneal in a reducing atmosphere at temperatures greater than 700 exp 0 C, infrared reflectance values greater than reflectance of super-smooth bulk molybdenum. Black molybdenum films deposited under oxidizing conditions and annealed, when covered with an anti-reflecting coating, approach the ideal solar collector characteristic of visible light absorber and infrared energy reflector. Write: DOE.

PAT-APPL-6-105 439

Superconducting Wire with Improved Strain Characteristics/303

Fil supraconducteur de résistance aux contraintes améliorée/303

Filed December 19, 1979, by the Department of Energy. A superconducting wire comprising a superconducting filament and a beryllium strengthered bronze matrix in which the addition of beryllium to the matrix permits a low volume matrix to exhibit reduced elastic deformation after heat treating which increases the compression of the superconducting filament on cooling and thereby improve the strain characteristics of the wire. Write: DOE.

PAT-APPL-6-182 879

Crystal Cleaving Machine/303

Technique de clivage des cristaux/303

Filed August 29, 1980, by NASA. A machine is disclosed for cleaving hard crystals with precision and uniformity. It includes a vertical axis positioning control means for an adjustable spring tension guided hammer mechanism employed to strike an anvil and thereby generate a crystal cleaving shock wave transmitted to a cleaving blade. An underlying crystal holding fixture with horizontal position control means includes a zero reference stop face for the crystal and opposing spring loaded clamping and vertical positioning elements which are precisely guided. The crystal is restrained only to the extent that it remains in an ideal position for cleaving until the shock wave begins to propagate along a cleavage plane. Thus the shock wave forces that separate the crystal are balanced and the light restraining force used to hold the crystal allows it to splay apart with minimal shock wave damping. Write: NASA, Goddard Space Flight Center, Mail Code: 204, Greenbelt, Maryland 20771 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania, 19102, U.S.A.

PAT-APPL-6-171 928

Digital Demodulator/303

Démodulateur numérique/303

Filed July 18, 1980, by NASA. A digital demodulator for converting pulse code modulated (PCM) data from phase-shift key (PSK) to non-return-to-zero (NRZ-L) and to bio phase (BiO-L) is described. The demodulator is composed of standard integrated logic circuits. The key to the demodulation function is a pair of cross coupled one shot multivibrators which, with a flip-flop produce the NRZ-L. In order to generate BiO-L, the PSK carrier is constrained to be 2 to the n times the data bit rate. If NRZ-L is all that is required, the circuitry is greatly simplified and the 2 to the n times bit rate constraint can be removed from the carrier. A flip-flop, an OR gate, an AND gate, and a binary counter generate the bit rate clock BTCK for the NRZ-L. The remainder of the circuitry is for converting the NRZ-L and BTCK into BiO-L. Write: NASA, Langley Research Center, Mail Code: 279, Hampton, Virginia 23665 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

PAT-APPL-6-171 934

Film Advance Indicator/303

Indicateur d'avance de film/303

Filed July 18, 1980, by NASA. A film advancement indicator which includes an optical sensor that detects the rotational movement of a disc that rotates only when the film advances is described. When the film does not advance an indicator light is activated. A counter is included in the electronic circuit to determine the number of film frames advanced. Write: NASA, Langley Research Center, Mail Code: 279, Hampton, Virginia 23665 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

PAT-APPL-6-178 192

Synthesis of Dawsonites/303

Synthèse de dawsonites/303

Filed August 14, 1980, by NASA. Alkali metal and ammonium dawsonites are prepared by a nonaqueous process where equimolar quantities of the corresponding hydrogen carbonate and aluminum hydroxide in finely divided state are heated together to a temperature within the range of 150 to 250 C for a period of 1 to 6 hours under a carbon dioxide pressure within the range of 120 to 360 psig. Carbonates may be used instead of hydrogencarbonates. A type of dawsonite is provided that can be used in extinguishing fires caused by hot surface ignition of hydrocarbon fuels. 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-6-183 707

An Improved Synthesis of 2,4,8,10-Tetroxaspiro (5.5) Undecane/303

Méthode améliorée pour la synthèse du 2,4,8,10-tétroxaspira (5.5) undécane/303

Filed September 3, 1980, by NASA. Pentaerythritol can be converted to its diformal, 2,4,8,10-tetroxaspiro (5.5) lundecane, by heating it to a temperature within of about 110 to 150 C for a period of up to 10 minutes, in the presence of a slight excess of paraformaldehyde and of a catalytic quantity of an acid catalyst such as sulfuric acid. The reaction

may be carried out in two steps, by forming first the monoformal, then the diformal. In any case, total reaction time is about 10 minutes and yield of diformal are greater than 90 percent. Several advantages of the improved process in terms of shortened reaction times, yields labor and energy requirements, adaptability to continuous operation, and overall simplicity and convenience are discussed. 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-944 667

High Range Resolution Radar Rate Aided Range Tracker/303

Dispositif de poursuite assisté par radar à fort pouvoir séparateur en distance/303

Filed September 22, 1978, by the Department of the Navy. Means for enabling a high range resolution radar to maintain precise range information of a high velocity maneuvering aircraft or other target during radar operation. A voltage indicative of target motion is provided as an input to a voltage controlled oscillator that develops a waveform having a frequency that varies from the frequency of a stable reference oscillator by an amount commensurate with that voltage input. The frequency differential of the two oscillators is utilized to cause the tracking window to move in proportion to the range rate of the target. Write: NAVY.

PAT-APPL-6-147 815

Method of Rendering Nitrile Elastomer Surfaces Receptive for Bonding by Epoxy Adhesives/303

Technique de conditionnement des surfaces nitrilo-élastomères pour réception de résines époxy adhésives/303

Filed May 8, 1980, by the Department of the Navy. A method of preparing nitrile elastomer surfaces for bonding by epoxy adhesives is presented. A treating solution comprising a dilute concentration of a mineral acid such as HCl in a carrier comprising water and either alcohol or ketones is prepared. The treating solution is applied to the elastomer surface with the surface being hydrolyzed in a mild manner thereby providing an improved adherable surface for covalent bonding by epoxy adhesives. A surfactant can be added to the treating solution for cleaning the surface to enhance the surface treatment. Write: NAVY.

PAT-APPL-6-153 811

Blazed Surface Relief Holographic Optical Elements/303

Éléments optiques holographiques à plan à incision/303

Filed May 27, 1980, by the Department of the Navy. A method of making a blazed surface relief holographic element is disclosed using controlled orientation of exposing wavelengths on a photo resist surface to a substrate. A blazed surface serves a grating which reinforces diffraction by refraction of the blazed surface. This increases theorically obtainable diffraction efficiency to greater than 90%. Alternate methods of surface formation include holographic exposure and computer mask generation. Different blaze angles can be obtained depending on the angle of incidence. Write: NAVY.

PAT-APPL-6-155 879

High Density Liquid Fuels/303

Combustibles liquides de masse volumique élevée/303

Filed June 6, 1980, by the Department of the Navy. A new and improved high density fuel for airbreathing engines and a process for preparing it are illustrated in the present invention. In accordance with this invention, a new and improved high density fuel for airbreathing engines and a process for preparing it, consisting of pure exo-tetrahydro-tri-cyclopentadiene (EXO-THTC) alone and in combination with mixtures of other high density fuels are illustrated. Write: NAVY.

PAT-APPL-6-156 157

Holographic Corrector Element/303

Élément correcteur holographique/303

Filed June 3, 1980, by the Department of the Navy. Holographic optical elements reshape radiation wavefronts primarily by the mechanism of diffraction, as opposed to refraction and reflection of conventional lens and mirrors. Unlike lens and mirrors, whose geometrical shape is critical to performance, holographic optical elements in this invention are quite thin. They may be fabricated to reshape wavefronts as required while being of nearly arbitrary shape themselves. Since the optical properties of a hologram are independent of the element's shape to first order, the element is recorded as a thin film layer lining the inner surface of the frontal enclosure. This thin film hologram will be a phase only hologram which is basically transparent to radiation from other than the desired direction. Write: NAVY.

PAT-APPL-6-162 351

Gas Pressurizer/303

Dispositif de mise sous pression des gaz/303

Filed June 23, 1980, by the Department of the Navy. A gas-dispensing, piercing pintle is concentrically housed over a stub inside a cannister. The cannister is covered by a diaphragm and forms a cap over the open end of a pressure conducting stand-pipe, and is submerged in the oxidizer liquid in a rocket-powered drone. Upon opening the pressure source, the piercing pintle is forced through the diaphragm and rises above the level of the oxidizer to pressurize the oxidizer tank. It is therefore an object of the present invention to provide a gas-pressurizer that operates simply and efficiently. It is a further object of the invention to provide a gas-pressurizer that may be used to initiate a hypergolic reaction but that will work reliably and safety. It is a still further object of the invention to provide a gas-pressurizer that may be installed in a target drone and safely stored over a period of years. These and other objects of this invention will appear from the following specification, and are not to be construed as limiting the scope of the invention thereto, since in view of the disclosure herein, others may be able to make additional embodiments within the scope of the appended claims. Write: NAVY.

PAT-APPL-6-164 449

Electronically Conductive Oxidizer Material and Method for Preparing It/303

Matériau oxydant conducteur électronique et méthode de préparation de ce matériau/303

Filed June 30, 1980, by the Department of the Navy. The present invention produces an electronically conductive oxidizer. It is also a method for its preparation. Vanadium pentoxide, V2O5, is heated to a temperature in the range from about 400 degrees C to about 500 degrees C and then subjected to a flowing gas until there is no further water evolved. The resulting product has a lower oxidation state than vanadium pentoxide and is electronically conductive. Write: NAVY.

PAT-APPL-6-165 000

Near Infrared Polarizers/303

Polariseurs dans le proche infrarouge/303

Filed July 1, 1980, by the Department of the Navy. Construction of infrared polarizers with wire grids of better than 4300 l/mm is accomplished by a four step process. The first step is to coat a layer of conductive material on a substrate. The substrate should have high transmission for the spectral region desired and the conductive coating should be highly conductive at that same spectral region. Next, a layer of photoresist is deposited over the conductive coating. The photoresist is then exposed in the third step to an interference pattern of two beams from a laser source which records a plane grating in the photoresist. The photoresist is then developed to produce a surface relief grating. The last step requires milling the surface relief grating with commercial ion milling techniques to reproduce the relief surface on the transparent conductive material. Write: NAVY.

PAT-APPL-6-172 585

Instrument for Measuring Dynamic Viscoelastic Properties/303

Instrument de mesure des propriétés viscoélastiques dynamiques/303

Filed July 28, 1980, by the Department of the Navy. A method and apparatus for measuring the dynamic material mechanical response of the strip for phase and amplitude. The shaker is programmed to step piecewise over the fre-

constants of rubber compounds is disclosed. The rubber compound is tested in strip form by attaching one end of the strip to an electro-mechanical shaker while the opposite end of the strip is suspended under constant tension. The electromechanical shaker propagates an acoustic wave in the test strip and a piezoelectric transducer positioned at a first point on the test strip measures the quency range from 100 Hz to 40 KHz by a frequency synthesizer. The distance between the shaker and the transducer is changed and data is obtained for a second point on the strip. The test values obtained are used to calculate Young's Modulus and the loss factor for the rubber compound. Write: NAVY.

PAT-APPL-6-176 376

Helicopter Extractable Cold Weather/ Water Liferaft/303

Embarcation de sauvetage par temps froid et en eaux glacées, récupérable par hélicoptère/303

Filed August 8, 1980, by the Department of the Navy. The present invention is directed to providing an improvement for a liferaft having a base supporting sides above and a ballasting chamber below for protecting survivors from exposure. A means extends beneath and across the base and terminates above the raft for cradling it and its occupants in a supporting manner. Means is disposed at the termination above the base and sides of the liferaft for positioning a portion to engage a lifting hook and a means is disposed on the ballasting chamber for providing at least one opening for dumping water from the ballasting chamber as the liferaft is lifted from the water by the lifting hook. Thus, the liferaft and its occupants can be retrieved by, for example, a helicopter, without further exposure to allow more effective treatment at a remote aid station. A reflective coating on the inside of a canopy helps prevent hypothermia. It is a prime object of the invention to provide an improvement for liferafts. Another object is to provide an improvement for inflatable liferafts which reduces the exposure to survivors. Another object of the invention is to reduce the hazards attendant to final stages of the rescue operation. Write: NAVY.

PAT-APPL-6-176 426

Smoke Generating Apparatus/303

Appareil générateur de fumée/303

Filed August 8, 1980, by the Department of the Navy. This invention relates generally to training devices. In particular, this invention relates to a training device for simulating the smoke of a fire. The subject invention overcomes some of the disadvantages of the prior art, including these mentioned above, in that it comprises a relatively simple smoke generating apparatus which produces a nontoxic smoke. Included in the subject invention is a storage tank having stored therein a smoke producing agent utilized by the subject invention, a base support member mounted upon the top surface of the storage tank, and a housing fixedly attached to the base support member. Mounted within the aforementioned housing is a tubular coil which superheats the smoke producing agent to a predetermined temperature such that when an operator activates a push button switch which in turn activates a solenoid valve affixed to the housing, the smoke producing agent will pass through the solenoid valve into the atmosphere so as to form a vapor, and thereby simulate the smoke of a fire. Write: NAVY.

PAT-APPL-6-178 330

Photographic Image Enhancement by a Gold-Toning Neutron-Activation Process/303

Amélioration de l'image photographique par vitrage à l'or suivant un procédé d'activation des neutrons/303

Filed August 15, 1980, by the Department of the Navy. A method is disclosed for a gold-toning neutron-activation process for intensifying or amplifying the contrast in extremely weak images in photographic negatives where the exposure level may be as low as 1.5% of optimum. The method involves three main steps: (a) gold toning of the silver image on the negative; (b) neutron activation of the gold image to produce radioisotopes; and (c) transferring the image to an unexposed autoradiographic film as the ionizing radiation from the radioactive gold exposes the film to produce intensification of the contrast. Write: NAVY.

PAT-APPL-6-179 607

Highly Aromatized Polyphtalocyanines/303

Polyphtalocyanines hautement aromatisées/303

Filed August 19, 1980, by the Department of the Navy. The synthesis and subsequent polymerization of highly aromatized phthalonitrile monomers which contain phenoxy linkages having a substantially aromatic spacer moiety between the two terminal phthalonitrile groups is disclosed. The phthalonitriles are synthesized by a nucleophilic dis-

placement of a nitro substituent, which is activated by the ring cyano groups on the aromatic ring, by a phenoxide containing unit. The phthalocyanine polymers have improved toughness, low water absorptivity and higher thermal and oxidative resistance than currently available polymers. Write: NAVY.

PAT-APPL-6-185 047

Linear Motion and Pop-up Target Training System/303

Système d'entraînement au tir comportant une cible à bascule et déplacement linéaire/303

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed September 8, 1980, by the Department of the Navy. A linear motion and pop-up target training system is disclosed for training a marksman to fire a simulated weapon. Located upon the terrain surface of a modelboard are six pop-up targets and three bidirectional linear motion targets, each of which emits, when activated by a first microprocessor computer, a pulsed beam of infrared light. Mounted upon the weapon is a sensor which will sense the pulsed beam of infrared light emitted by the activated target. The sensor then supplies to a rifle electronics circuit an analog signal proportional to the amount of light received by the sensor, and the rifle electronics circuit converts the analog signal to a digital logic signal to be supplied to a second microprocessor computer. The second microprocessor computer then processes the digital logic signal in accordance with a predetermined computer program so as to determine whether the marksman has scored a hit, a miss, or a near miss upon the activated target. Write: NAVY.

PAT-APPL-6-185 702

Method of Manufacturing a Field-Emission Cathode Structure/303

Méthode de fabrication d'une structure de cathode émettrice d'électrons/303

Filed September 10, 1980, by the Department of the Navy. A method of manufacturing a field-emitter array cathode structure in which a substrate of single crystal material is selectively masked such that the unmasked areas define islands on the underlying substrate. The single crystal material under the unmasked areas is orientation-dependent etched to form an array of holes whose sides intersect at a crystallographically sharp point. Following removal of the mask, the substrate is covered with a thick layer of material capable of emitting electrons which extends above the substrate surface and fills the holes. Thereafter, the material of the substrate underneath the layer of electron-emitting material is etched to expose a plurality of sharp field-emitter tips. Write: NAVY.

PAT-APPL-6-198 537

Public-Access Information System Terminal/303

Terminal informatique d'accès public/303

Filed October 20, 1980, by the Department of Transportation. The invention relates generally to information retrieval systems, and is particularly concerned with a computer-linked remote terminal unit for providing public access to electronically stored route and schedule information at airports, bus terminals, railway stations and other transportation centers. Write: NTIS.

PAT-APPL-6-203 556

Digital Air Brake Control System/303

Commande numérique de freins pneumatiques/303

Price per copy from NTIS: PC U.S. $8.00/MF U.S. $3.50, filed November 5, 1980, by the Department of Transportation. The invention generally concerns a microcomputer-operated air brake control system for controlling the air brakes of a railroad car. Such air brakes typically include a pneumatically operated brake cylinder pneumatically connected through appropriate valves to both an auxiliary air reservoir and an emergency air reservoir, both of which are in turn connected to a train air line which runs the length of the train. Write: NTIS.

Licensing Opportunities Through Dr. Dvorkovitz and Associates, U.S.

The following technologies are offered for manufacture under license in Canada. A fee is required from licensees who are successful in concluding agreements. When requesting additional information, please quote the reference number. Write: Dr. Dvorkovitz and 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.

A5421 — Plastic Building Block/303

West German firm offers a Canadian company an exclusive license to manufacture and market its patented system of interlocking ornamental plastic building blocks. The method of manufacture is by automated moulding injection using a synthetic high density PVC as the basic material. It is a do-it-yourself system suitable for the construction of wind and sight barriers, partition walls for terraced homes, delimiting walls, fences, balconies, room divider screens, etc. Advantages offered by the system are: extremely waterproof, elegantly smooth surfaces, always clean, maintenance free, no painting, no holes to collect dirt, ease of assembly, no painting of joints or smoothing of mortar, no chipping corners, robust and sturdy, panes made of tinted synthetic glass and most interesting to cost conscious consumers.

A6003 — Feed Products (Starea)/303

Kansas State University Research Foundation offers the manufacturing and marketing rights to "Starea" a feed product containing nonprotein nitrogen compounds and a method for producing same. Starchy material such as grain is mixed with urea and extruder cooked. The product is a feed for ruminants comparable in performance to soybean meal. Unless processed in this manner, urea can be fed to cattle and sheep in only very limited quantities without danger of toxicity. Extensive data have proven the efficiency of the product. A trademark on "Starea" is also available. It can be used in feeding both dairy and beef cattle and sheep. It produces a protein supplement for ruminant feeding having a protein equivalent as high as soybean meal and higher. This product and process is patented in Canada and has been licensed in Sweden, Denmark, Australia, Japan and the U.K.

Possibilités d'acquisition de licences par l'intermédiaire de Dr. Dvorkovitz and Associates, É.-U.

Les techniques suivantes sont proposées pour la fabrication sous licence au Canada. Des droits seront exigés des fabricants qui parviendront à conclure un contrat de production sous licence. Lors de la demande de renseignements supplémentaires, veuillez citer le numéro de référence. Écrire à: Dr. Dvorkovitz and 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.

A5421 — Blocs de construction de plastique/303

Une compagnie ouest-allemande offre à une compagnie canadienne les droits exclusifs de fabrication et de commercialisation sur son système breveté de blocs de construction de plastique ornementaux emboîtables. Le procédé de fabrication est le moulage par injection automatisé utilisant du PVC synthétique à haute densité comme matériau de base. C'est un système pour bricoleurs, qui sert à la construction d'abris contre le vent et les regards, de séparations extérieures pour maisons en rangées, de murs de propriété, de clôtures, de balcons, de cloisons intérieures, etc. Ce système offre de nombreux avantages: des surfaces extrêmement imperméables, lisses et esthétiques, toujours propres, sans entretien, sans peinture, exemptes de pores pouvant retenir la saleté; l'assemblage est facile, pas besoin de peindre les joints ou de lisser du mortier; l'ensemble est robuste, les coins des blocs ne se brisent pas et les carreaux sont de verre synthétique teinté. De plus, le coût de ce mode de construction plaira aux consommateurs.

A6003 — Aliment d'animaux (Starea)/303

La Fondation de recherche de l'université de l'État du Kansas offre les droits de production et de commercialisation ainsi que la méthode de fabrication de "Starea", aliment d'animaux à composés azotés non protéiques. On mélange un féculent, par exemple des grains, avec de l'urée et on cuit le tout dans un extrudeur. Le produit ainsi obtenu peut nourrir le bétail et donne des résultats comparables à ceux obtenus avec les aliments à base de fèves de soja. L'urée qui n'est pas traitée selon cette méthode est toxique pour les bovins et les ovins, de sorte que ces derniers ne peuvent l'absorber qu'en quantité très limitée. Des données complètes montrent l'efficacité du produit. On peut également obtenir la marque de commerce "Starea". Le produit peut servir à l'alimentation des ovins, des bovins de boucherie et des vaches laitières: il leur assure un apport protéique égal, sinon supérieur, à celui que procurent les aliments à base de fève de soja. Le produit et la méthode de fabrication ont été brevetés au Canada et ont fait l'objet d'une license en Suède, au Danemark, en Australie, au Japon et au Royaume-Uni.

A6651 — Highly Sensitive Analyses of Trace Gases and Pollutants in Air/303

American research laboratory offers to license in Canada its package of seven patents relating to ways of measuring small concentrations of NO, NO_x, CO_2, SO_2, and photochemically active hydrocarbons in air. The package includes a way of calibrating NO_x/ozone monitors and of converting NO_2 to NO, which is necessary for NO_x measurement. The analytical techniques involve chemiluminescent or chemiionization reaction chemistry and are generally sensitive in the parts per billion range. Main advantages: measures NO, NO_x, and ozone with very high sensitivity; calibration for ozone can be based on calibrations for NO and NO_x, ozone can be measured in the same instrument; the measurement of active hydrocarbons yields a direct reading of their potential for producing photochemical smog. The method is in use. Economic data and know-how is also available. Patents are issued in the U.S., Canada (1,049,808), Japan, West Germany and the U.K.

A6651 — Analyses ultrasensibles des gaz et polluants à l'état de traces dans l'air/303

Un laboratoire de recherche des États-Unis propose d'accorder une licence pour le Canada de son ensemble de sept brevets relatifs à la mesure des faibles concentrations atmosphériques de NO, NO_x, CO_2, SO_2 et d'hydrocarbures actifs du point de vue photochimique. L'ensemble comprend également une façon d'étalonner les moniteurs de NO_x/O_3 et de convertir NO_2 en NO afin de pouvoir mesurer NO_x. Les techniques d'analyses font appel à des réactions de chimioluminescence et de chimionisation, généralement sensibles à des concentrations de l'ordre de quelques parties par milliard. Principaux avantages: mesure de NO, NO_x et O_3 avec une grande sensibilité; l'étalonnage pour O_3 peut être basé sur les étalonnages pour NO et NO_x, et O_3 peut être mesuré avec le même instrument; la mesure des hydrocarbures actifs permet une lecture directe de leur potentiel de production de brouillard photochimique. La méthode est déjà utilisée. On peut obtenir des données économiques et de l'aide technique. Brevets délivrés: É.-U., Canada (1 049 808), Japon, Allemagne de l'Ouest et R.-U.

A6654 — One-Man Operated Elevator Cable Chair/303

French company offers a Canadian company worldwide optional licensing and marketing rights to a unique climbing chair that allows one person to go up or down at will along a cable up to a height of 60 meters. The user sits in the escalator and by turning a handle can climb at the rate of 6.5 meters per minute with only 3.2 kg pull on the crank; the average climb is 0.8 meter per turn. The escalator is offered with either a single or a dual cable and can be used for climbing anywhere by workers in the petroleum industry, plumbers and repairmen. It can also be used by building maintenance and for cleaning high rise structures. The user has the advantage of being seated while doing work anywhere along the vertical cable; the apparatus is low cost and can be handled by one person. Secrecy agreement is not required to obtain confidential data. Patents are available in France, West Germany and Switzerland.

A6654 — Chaise-ascenseur, monoplace, à câble/303

Une société française offre à une société canadienne les droits mondiaux d'exploitation sous licence et de commercialisation d'une chaise-ascenseur unique qui permet à quiconque y prend place de monter ou de descendre à volonté le long d'un câble, jusqu'à 60 mètres au maximum. L'utilisateur s'assoit sur la chaise et, en tournant une manivelle, peut se hisser à raison de 6.5 mètres à la minute, la force à exercer sur celle-ci n'étant que de 3.2 kg; la hauteur moyenne de montée est de 0.8 mètre par tour de manivelle. La chaise-ascenseur est disponible en deux modèles: à câble unique ou à câble double; elle peut être employée comme moyen de hissage par les travailleurs dans l'industrie du pétrole, par les plombiers et par les réparateurs de tout genre. De plus, elle peut être utilisée par les services d'entretien d'immeubles pour nettoyer les édifices en hauteur. L'avantage de cette chaise est que l'utilisateur peut rester assis tout en travaillant partout le long du câble vertical; l'appareil ne coûte pas cher et peut être manipulé par une seule personne. Il est possible d'obtenir des données confidentielles sans restriction. Des brevets sont disponibles en France, en Allemagne de l'ouest et en Suisse.

A6655 — Power Trowel for Floating, Trowelling or Smooting Concrete Floors/303

It is claimed that this power trowel will produce well floated and finished concrete surfaces at low costs. The four bladed model has a ring of 0.9 m, with a handle designed for crane handling as well as interchangeable screeds. The vibration frequency is between 3000 and 3600 vibrations per minute. The main uses for this power trowel would be for floating, finishing, striking off and compacting in one pass concrete floors. It can be used with an electric or gas engine.

A6655 — Truelle mécanique pour talochage, étalement et lissage des planchers de béton/303

Il semble que cette truelle mécanique puisse bien talocher et finir à peu de frais des aires bétonnées. Le modèle à quatre pales possède un anneau de 0.9 m, une poignée conçue pour être suspendue à une grue et des guides interchangeables. L'appareil est animé de 3000 à 3600 vibrations à la minute. Il est surtout destiné à talocher, finir, araser et compacter les planchers de béton en une seule passe et peut être mû par un moteur à essence ou électrique.

A6657 — Shock-Absorbant Packaging/303

It is claimed that this shock-absorbant packaging process of rubber or elastomeric plastic for storing or transporting gas bottles, tubes, steel rolls, etc., can be combined with storage racks of any desired height. Having no glass, it can be manufactured from a more rigid compound in the bottom and a softer one in the recesses. The main use is stated to be for storing and transporting of cylindrically shaped bodies, or bodies with cylindrical ends.

A6662 — Optical Projection and Reproduction Devices/303

This invention relates to an optical apparatus for the projection, and especially the reproduction, of macro- and/or micro-originals, such as books, sheets, flat films, roll films, etc., so that such documents can be converted to a uniform and storable size.

A6817 — Fantachrome System — Non-Repetitive Electro-Kinetic Art/303

American company offers know-how and licensing rights to a Canadian company to manufacture and distribute its electrokinetic color display. The operation starts by passing a small, low-voltage current through an aqueous solution of chemicals and dyes encased in a thin transparent container. A moving magnetic field interacts with the electric field to produce unusual visual effects. Swirling colors make cyclonic patterns not unlike cloud formations, stimulating the imagination and pleasing the senses. Non-repetitive patterns continually change color, with periods of turbulence being interspersed by restful periods of slowly changing patterns. It can be used for advertising displays, from point-of-sale to billboards; kinetic abstract art, for galleries, homes, offices, meditation centers, etc.; classroom instruction in art, physics and chemistry. Its main advantages are claimed to be: unusual visual appeal, which captures and holds viewers' attention; unique, ever changing visual effects at reasonable cost; to demonstrate art and scientific principles and that it can be made to interact with music.

S6817 — Screwdriver/303

American company offers the manufacturing and worldwide marketing rights to a Canadian company for its patented (U.S. Patent No. 3,842,875) multi-purpose screwdriver which holds and drives slotted screws without magnets, clips or other complications. Mainly used by mechanics in garages or factories and for home construction, the implement can also remove paint from the screw slot, drive screws in normally inaccessible locations, drive Phillips headed screws, remove staples, nails, etc. without need for a separate tool. It can be forged integral with the tip at the same cost as an ordinary screwdriver.

A6657 — Emballage anti-chocs/303

On affirme que cet emballage anti-chocs en caoutchouc ou en plastique élastomère servant à entreposer ou à transporter des bouteilles de gaz, des tubes, des rouleaux d'acier, etc., peut être utilisé de concert avec des casiers de stockage de la hauteur que l'on désire. Comme il ne comporte pas de verre, on peut utiliser un matériau de construction plus rigide pour le fond et un plus mou pour les évidements. Il est principalement utilisé pour l'entreposage et le transport des corps de forme cylindrique ou des corps ayant des extrémités cylindriques.

A6662 — Projecteur-reproducteur d'images/303

Il s'agit d'une machine pouvant projeter et reproduire des macro-originaux et des micro-originaux comme des livres, des feuilles mobiles, des rouleaux de film, etc. L'uniformité des dimensions des reproductions en facilite le classement.

A6817 — Système Fantachrome — Figures artistiques changeantes électro-cinétiques/303

Une entreprise américaine offre les droits de savoir-faire et d'exploitation sous licence pour la fabrication et la distribution de son système d'affichage électro-cinétique en couleur. Un faible courant basse tension traverse une solution acqueuse de produits chimiques et de teintures contenue dans un petit récipient transparent mince. Un champ magnétique changeant se combine avec le champ électrique pour produire des effets visuels inhabituels. Les couleurs suivent les lignes de force et prennent un peu l'aspect de formations nuageuses. L'effet stimule l'imagination d'une façon agréable pour les sens. Les motifs changent continuellement de couleur et de forme, avec des périodes de turbulence entrecoupées de périodes où les motifs changent lentement. On peut utiliser ce système pour des applications publicitaires, du point de vente au panneau publicitaire; en art cinétique abstrait (dans les galeries, les maisons, les bureaux, les centres de méditation, etc.); pour l'enseignement de l'art, de la physique et de la chimie. Ses principaux avantages présentés sont: un attrait visuel inhabituel, qui capte l'attention de ceux qui regardent; la production d'effets visuels uniques et toujours changeants à un coût raisonnable; la démonstration de principes scientifiques et artistiques et la possibilité de combinaison musicale.

S6817 — Tournevis/303

Une société américaine offre les droits de fabrication et de commercialisation mondiale à une société canadienne pour son tournevis tout usage breveté (Brevet U.S. N° 3 842 875) qui maintient en place et serre les vis à tête fendue sans avoir besoin d'aimant, de griffes ou d'autres dispositifs. Utilisé principalement par les mécaniciens de garages ou d'usines et dans la construction domiciliaire, cet outil peut également enlever la peinture de la fente des vis, serrer les vis dans des endroits normalement inaccessibles, serrer des vis à empreinte cruciforme et enlever des agrafes, des clous, etc., sans qu'on n'ait besoin d'un autre

outil. Le tournevis et sa pointe peuvent être forgés d'un bloc au même prix qu'un tournevis ordinaire.

S6819 — Downhill Skiing Simulator/303

American inventor offers the Canadian manufacturing and worldwide marketing rights to a skiing simulator for teaching and practicing skiing maneuvers. The simulator is patented in Australia, Austria, Belgium, Brazil, Canada, France, Italy, Japan, Netherlands, Switzerland and U.S.A. It includes ski structural means, a ski pole simulating means and a frame to which they are secured. The ski structural means includes a turntable which is hydraulically rotatable back-and-forth in a horizontal plane and includes a rocker pivotal about a horizontal axis and which is also hydraulically actuated. The pivotal rocker carries a carriage to which is attached a ski mounting means. The carriage slides by gravity from one end of the rocker to the other, as the rocker and turntable are pivoted by motive means, while the skier grasps handles of the ski pole simulating means and performs various maneuvers.

S6819 — Simulateur de ski alpin/303

Un inventeur américain propose de céder ses droits pour la fabrication au Canada et la commercialisation dans le monde d'un simulateur de ski pour l'enseignement et la mise en pratique. Le simulateur est breveté en Australie, en Autriche, en Belgique, au Brésil, au Canada, en France, en Italie, au Japon, aux Pays-Bas, en Suisse et aux États-Unis. Il comporte un dispositif-simulateur de skis, un dispositif-simulateur de bâtons et un cadre de support. Le dispositif simulateur de skis comprend une base mobile, dont la rotation dans le plan horizontal est assurée par un dispositif hydraulique, ainsi qu'un mécanisme de bascule autour d'un axe horizontal, également commandé par un circuit hydraulique. Le mécanisme de bascule supporte un chariot sur lequel un dispositif de montage du simulateur de skis est fixé. Le chariot glisse d'un bout à l'autre du mécanisme à bascule par gravité quand le mécanisme et la base mobile sont en mouvement et que le skieur tient les poignées des bâtons et fait ses manoeuvres.

S6820 — Game/303

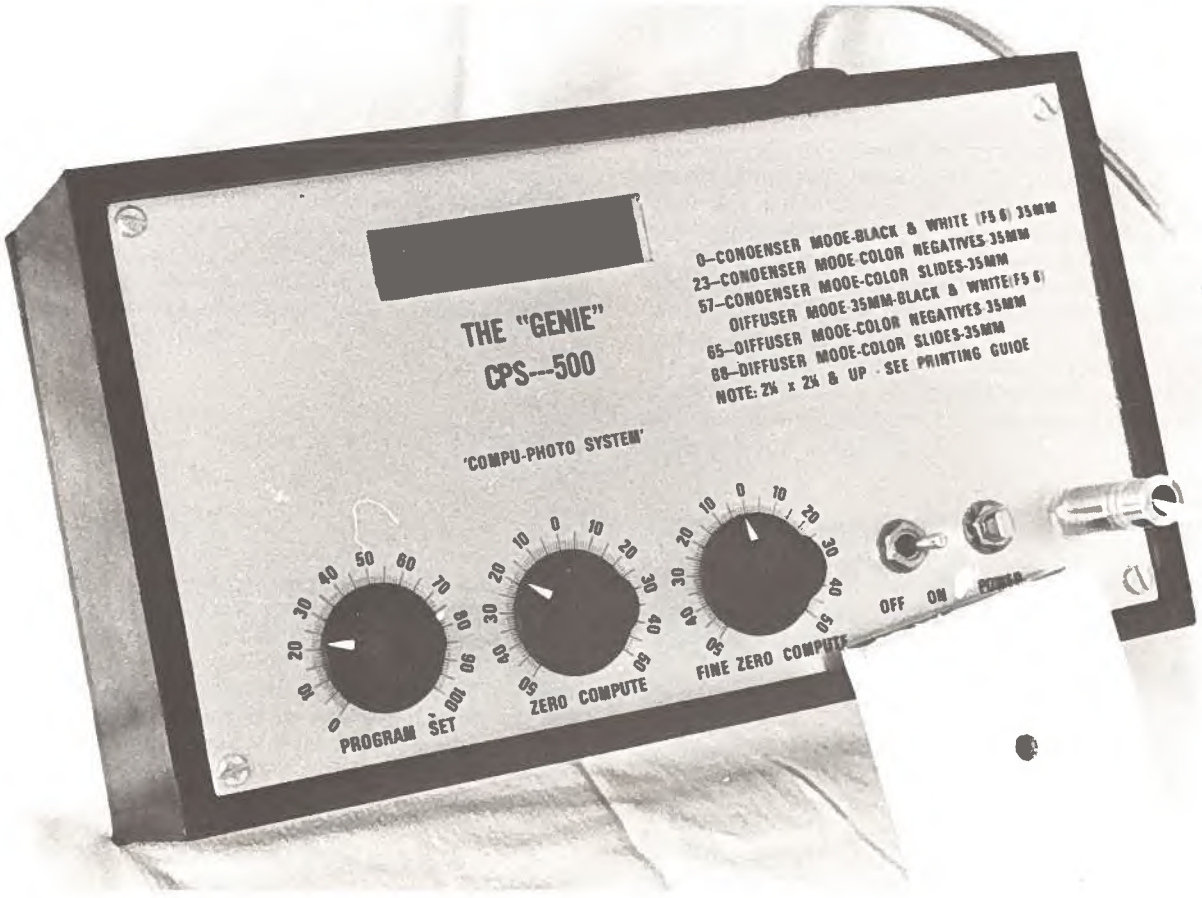
American inventor offers a Canadian company the manufacturing and marketing license for a "BECOME A SUCCESS™" board game which is played like "MONOPOLY" by two to four players from 7 to 77 years old. It gives one the opportunity to make a career come true. The game is designed around professions that are common knowledge to everyone. BECOME A SUCCESS™ gives the young person a way of relating to jobs and a career. It also shows them the relationship between professions. Moreover, it demonstrates how college plays an important role in the professional fields. The object of the game is to be wealthier than anyone else in the game.

S6820 — Jeu/303

Un inventeur américain offre à une société canadienne une licence de fabrication et de commercialisation du jeu "BECOME A SUCCESS"™ se jouant comme le MONOPOLY par de deux à quatre joueurs de 7 à 77 ans. Chaque joueur peut faire carrière dans une profession ou un métier qui, dans la réalité, touche le quotidien de chacun. Le jeu permet aux jeunes joueurs de prendre contact avec les réalités du travail et de la vie, leur montre les relations entre les diverses professions et leur souligne l'importance de l'éducation dans l'accession aux professions. Le but du jeu est de réussir mieux que tous les autres joueurs.

Mortar-Runner (See page 5)
Pose-mortier (Voir page 5) ▶

Digital Darkroom Computer
(See page 5)
Ordinateur numérique pour
chambre noire
(Voir page 5) ▼



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