new products bulletin

Bulletin 312, January 1982

bulletin de produits nouveaux

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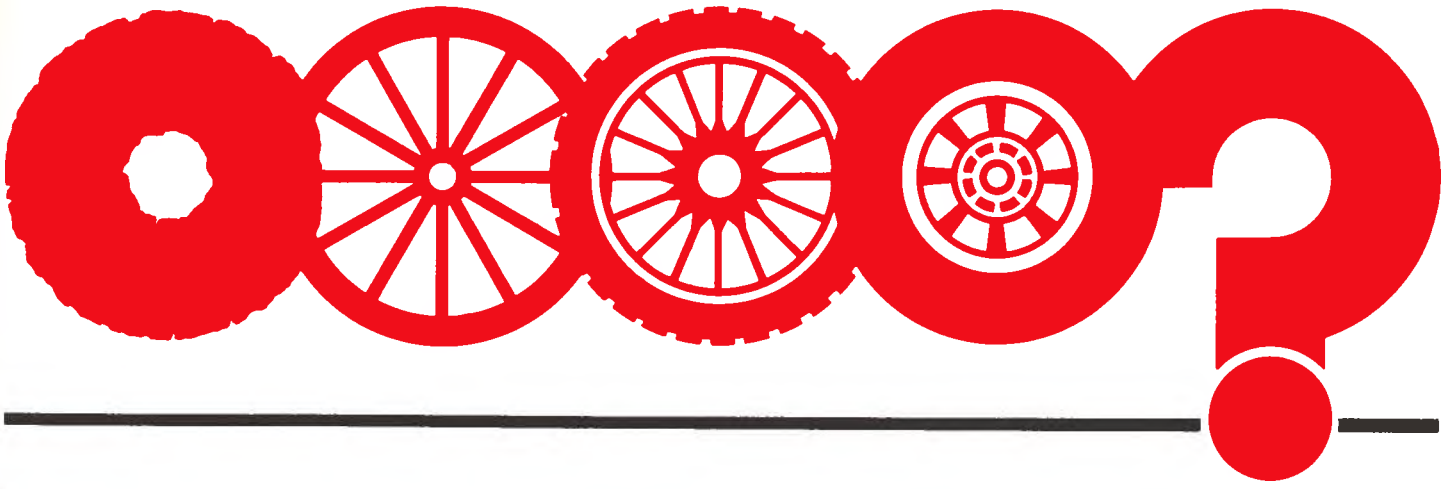

new products bulletin

bulletin de produits nouveaux

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

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

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

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

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Selected Licensing or Joint Venture Manufacturing Opportunities

Analgesic, Hyperglycemic and Anti-Inflammatory Compounds/312

A series of N-Carbonyl-Tetrahydropyridyl derivatives which exhibit analgesic, hyperglycemic or anti-inflammatory activity. Methods of preparation are given. Write: **Case 5996**, 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.

Pneumatic Ejection Mechanism for Material Handling/312

An ejection mechanism that provides for a quick release of a load with an adjustable ejection velocity. The system is easy to reload and "fail-safe". It can be used in many types of mechanical handling and logging operations. Write: **Case 6674**, 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.

Antenna Mast/312

This portable antenna mast can be installed without ground anchors and does not require a level site. Write: **Case 6678**, 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.

Improved Liner for Helmets/312

An improved liner for sports or motorcycle helmets which provides automatic sizing, using loose polystyrene beads, to fit the wearer's head. The resulting close, comfortable fit provides improved energy absorbing capabilities and minimizes head injuries. Write: **Case 7244**, 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.

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

Composés analgésiques, hyperglycémiants et anti-inflammatoires/312

Série de dérivés N-carbonyl-tétrahydropyridyliques exerçant une action analgésique, hyperglycémiante et anti-inflammatoire, avec méthodes de préparation. Écrire: **Cas 5996**, 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.

Mécanisme d'éjection pneumatique pour la manutention des matériaux/312

Il s'agit d'un mécanisme d'éjection produisant une détente rapide de la charge avec une vélocité réglable. Le dispositif est facile à recharger et comprend une sécurité intégrée. Il peut servir dans différents types d'opérations de manutention mécanique et d'exploitation forestière. Écrire: **Cas 6674**, 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.

Mât d'antenne/312

Ce mât d'antenne portatif peut être monté sans devoir utiliser de dispositif d'ancrage et sans que l'emplacement choisi soit plan. Écrire: **Cas 6678**, 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.

Garniture de casque améliorée/312

Meilleure garniture de casque, pour le sportif ou le motocycliste, qui s'adapte automatiquement au tour de tête grâce à de petites sphères de polystyrène. L'ensemble coiffe confortablement et offre une meilleure protection contre les chocs, réduisant ainsi les risques de blessures à la tête. Écrire: **Cas 7244**, 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.

University of Montreal Computer Translation System (TAUM)/312

TAUM is a 'second-generation' computer translation methodology now under development at the University of Montreal. The TAUM methodology has been used to produce a system for translating aircraft maintenance manuals from English to French which is called TAUM-AVIATION. All of the programs, dictionaries and documentation generated during the TAUM-AVIATION effort are now available for licensing to any company interested in developing and/or using a more advanced computer translation system based on the TAUM methodology. Access to the developers at the University of Montreal will also be available to any licensee. Write: **Case 7266**, 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.

Traduction Automatique de l'Université de Montréal (TAUM)/312

TAUM est une méthode de traduction informatisée de la "deuxième génération", en cours de perfectionnement à l'Université de Montréal. La méthode TAUM a servi à produire un système de traduction (de l'anglais au français) de manuels d'entretien d'aéronefs; ce système s'appelle TAUM-AVIATION. Tous les programmes, dictionnaires et documents issus du projet TAUM-AVIATION sont disponibles aux fins de licence à toute compagnie intéressée à mettre au point et(ou) à utiliser un système de traduction informatisée plus perfectionné, basé sur la méthode TAUM. Il sera possible à tout preneur de licence d'entrer en contact avec les chercheurs de l'Université de Montréal. Écrire: **Cas 7266**, 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.

Electronically Controlled Respirator/312

This respirator will minimize the work of distension of the lungs during the breathing cycle. It is primarily designed for infants and should greatly reduce clinical complications resulting from prolonged use of a respirator. Write: **Case 7299**, 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.

Respirateur à contrôle électronique/312

Ce respirateur minimise la distension des poumons durant le cycle respiratoire. Il est conçu principalement pour les nouveau-nés et devrait réduire considérablement les complications cliniques accompagnant l'utilisation prolongée d'un respirateur. Écrire: **Cas 7299**, 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.

Automatic Stirring System for Film Developing/312

This system provides a gentle agitated motion to the reel holding the film through a magnetic coupling to the rack and pinion drive. The film is completely immersed in the solution for complete and clear developing. A simple plastic reel holder allows your present tanks and reels to operate with a standard motor base. Write: **Case 7357**, 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.

Système d'agitation automatique pour le développement des films/312

Ce système assure une agitation légère de la spire contenant le film, grâce à un couplage magnétique au système d'entraînement à crémaillère. Le film est complètement immergé dans la solution aux fins d'un développement complet et uniforme. Un support simple de plastique permet l'utilisation de cuves et de spires ordinaires avec une base moteur standard. Écrire: **Cas 7357**, 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.

Ternary Logic Circuits with CMOS Integrated Circuits/312

Canadian inventor offers licensing rights to a technology covered by three issued Canadian patents in which ternary storage elements are realized using ternary operators and fundamental circuits and which are designed to make practical use of CMOS (or COS/MOS) integrated circuits. Word-organized and trit-organized memory cells are designed for the construction of a ternary random-access-memory array (TRAM). Several flip-flops (tri-flops) are constructed and described in detail, including a PZN (set positive, set zero and

Circuits logiques ternaires formés de circuits intégrés CMOS/312

Un inventeur canadien offre les droits de licence pour la technologie décrite ci-dessous protégée par trois brevets canadiens. Des éléments ternaires de mise en mémoire sont construits au moyen de circuits fondamentaux et d'opérateurs ternaires conçus de façon à utiliser des circuits intégrés CMOS (ou COS/MOS). Des cellules de mémoire à organisation de mots et à organisation de trits sont conçues en vue de la construction d'une structure de mémoires vives ternaires (TRAM). Quelques types de bascules à trois états

set negative), a clocked PZN, a D-type and a T-type. Ternary shift registers and ring counters are formed by means of these tri-flops. A master-slave T-type tri-flop is used for the construction of a ternary up counter which is able to count from 0 to 3^n using the normal ternary code or from $-(3^n-1)/2$ to $+(3^n-1)/2$ when the signed-ternary code is employed. With a little modification, a ternary down counter may also be constructed. A divide-by-M ternary counter which can be programmed is described. A ternary decoder and encoder are presented, which are the elements of a complete ternary read-only-memory (TROM). A modified ternary inverter (MTI) is taken as a unit cell of a ternary memory matrix. **PATENT 1,100,196** concerns three-value logic operators including a memory cell of a ternary memory matrix; **PATENT 1,109,127** concerns a three-valued logic operator having ternary NOR output; and **PATENT 1,109,128** concerns a three-valued logic operator having ternary NAND output. Write: Mr. Hussein T. Mouftah, c/o Mr. Donald E. Hewson, of Switzer, Shaw, Suite 200, 77 City Centre Drive, Mississauga, Ontario L5B 1M5 and send a copy of your initial correspondence to the Licensing Opportunities section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

sont construits et sont décrits en détails dans le document, y compris une bascule PZN (état positif, état zéro et état négatif), une bascule PZN déclenchée par horloge, une bascule de type D et une bascule de type T. Ces bascules servent à fabriquer des registres à décalage et des compteurs en anneau ternaires. Une bascule ternaire à trois états de type T en maître-esclave sert à la construction d'un compteur progressif ternaire pouvant compter de 0 à 3^n si l'on travaille en code ternaire normal, de même que de $-(3^n-1)/2$ à $+(3^n-1)/2$ si l'on travaille en code ternaire avec signe. Une légère modification permet de construire un compteur régressif ternaire. Un diviseur par M ternaire programmable est décrit. Un décodeur et un codeur ternaires sont présentés qui forment les éléments d'une mémoire morte ternaire (TROM) complète. Un inverseur ternaire modifié (MTI) sert de cellule élémentaire d'une matrice de mémoire ternaire. Le **BREVET 1,100,196** porte sur des opérateurs logiques à trois valeurs, y compris une cellule de mémoire d'un matrice de mémoire ternaire, le **BREVET 1,109,127** porte sur un opérateur logique à trois valeurs dont la sortie comporte une porte OU-NON ternaire, et le **BREVET 1,109,128** porte sur un opérateur logique à trois valeurs dont la sortie comporte une porte ET-NON ternaire. Écrire à Hussein T. Mouftah, a/s Donald E. Hewson du cabinet Switzer, Shaw, Suite 200, 77 City Centre Drive, Mississauga (Ontario) L5B 1M5, et faire parvenir une copie de la première lettre à la Section des possibilités de licence (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

Wireless Security Systems for Homes and Small Commercial Establishments/312

American company offers the manufacturing and marketing rights to its wireless security systems for homes and small commercial establishments. This technology uses microprocessor technology to provide almost wireless security systems for homes and small commercial establishments. The system uses a number of battery-powered remote sensing units to report intrusions, fires, and their own operating status to a microprocessor on the site. The microprocessor interprets these reports and phones a computerized monitoring station, which then notifies the appropriate agency to respond. The wireless feature cuts installation time, and hence, cost. The microprocessor's programmability gives the system some of the flexibility and precision of a manned one but at a lower cost. The technology is in limited production. Code number T1540. Write: Control Data Worldtech, Inc., 7600 France Avenue S., Edina, Minnesota 55435 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078, U.S.A.

Systèmes de sécurité sans fils pour le foyer et les petits établissements commerciaux /312

Une société américaine offre les droits de fabrication et de mise en marché pour ses systèmes de sécurité sans fils destinés aux foyers et aux petits établissements commerciaux. La technologie utilisée est basée sur un microprocesseur, de façon à obtenir des systèmes de sécurité presque sans fils pour les foyers et les petits établissements commerciaux. Le système est composé d'un certain nombre de blocs de télédétection alimentés par batteries qui rapportent les intrusions et les incendies et font état de leur statut opérationnel à un microprocesseur situé sur les lieux. Ce microprocesseur interprète les informations qui lui sont données et les transmet à une station de contrôle informatisée, par l'intermédiaire des lignes téléphoniques; cette station avertit alors l'organisme habilité à intervenir. Le fait que l'installation soit sans fils permet de diminuer le temps d'installation et, en conséquence, les frais d'installation. La possibilité de programmer le microprocesseur donne au système la souplesse et la précision d'un système non autonome, mais les frais d'exploitation sont moindres. Ce système est en cours de production sur une base limitée. Numéro de code: T1540. Écrire à: Control Data Worldtech, Inc., 7600 France Avenue S., Edina, Minnesota 55435 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078 (É.-U.).

Inductive Speed Measuring Probe/312

German manufacturer of an instrument for measuring flows of all liquids, i.e., mud, pulp, pastes, etc., seeks a joint ven-

Dispositif de mesure de la vitesse par induction/312

Un fabricant allemand a construit un instrument pour mesurer l'écoulement de tous les liquides. Boue, pâte à papier,

ture partner for the production of this device in Canada. The Canadian affiliate should have know-how in measuring and control techniques, process control, and in the field of machine construction generally, as well as energy, supply and depositing techniques. The flow measuring instrument employs the principles of magnetic field induction to measure the flow of liquids in closed pipes or open channels. The transmitter and receiver probes do not impede the flow of the liquid media such as mud slurry, pastes, sewerage, etc. Application for patent and industrial design on the "Speedometer" has been made. (See illustration page 39.) Write: MSR Paul Mähler, Amselweg 46, 5000 Köln 71, West Germany and send a copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, 4 Duesseldorf, West Germany.

pâte, etc. Il cherche un partenaire pour la production de ce dispositif au Canada. Le partenaire canadien doit avoir l'expérience nécessaire dans les techniques de mesure et de contrôle, le contrôle des processus et, en général, dans le domaine de la construction des machines ainsi qu'en énergie, et dans les techniques de placage et l'alimentation. Le dispositif de mesure de l'écoulement est basé sur les principes de l'induction magnétique et permet de mesurer l'écoulement des liquides dans des tuyaux fermés ou caniveaux ouverts. Les sondes du transmetteur et du récepteur n'empêchent pas l'écoulement des liquides tels que la boue, les pâtes, les eaux usées, etc. Le "Speedometer" a fait l'objet d'une demande de brevet et un modèle industriel est en conception. (Voir l'illustration page 39.) Écrire à: MSR Paul Mähler, Amselweg 46, 5000 Cologne 71 (Allemagne de l'Ouest) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, Immermannstrasse 3, 4 Duesseldorf (Allemagne de l'Ouest).

Completely External Pickup for Wire Carried Electronic Signals/312

American company offers worldwide licensing rights to a non-invasive signal pickup, A.C. coupled high impedence which is a non-invasive signal pickup technique that electrostatically couples A.C. signals and amplifies them without direct wire connections. It is presently used to acquire video signals. It is a simple, quick to install method of non-invasive signal pickup. The video version is now in production. The technology includes the devices as well as the technique. Code number T8626. Write: Control Data Worldtech, Inc., 7600 France Avenue S., Edina, Minnesota 55435 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078, U.S.A.

Dispositif entièrement externe de captage de signaux électroniques transmis par fils/312

Une compagnie américaine offre les droits mondiaux de licence pour un dispositif de captage de signaux, à couplage c.a. et à haute impédance, qui n'affecte pas le signal capté; le dispositif réalise un couplage électrostatique entre les signaux à courant alternatif, puis les amplifie sans qu'il soit nécessaire d'utiliser des connexsions par fils. Il sert actuellement à obtenir des signaux vidéo. C'est là une méthode simple et d'installation rapide pour capter les signaux sans les affecter. La production de la version vidéo est déjà commencée. La technologie proposée comprend les dispositifs de même que les techniques de fabrication. Numéro de code T8626. Écrire à: Control Data Worldtech, Inc., 7600 France Avenue S., Edina, Minnesota 55435 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078 (É.-U.).

Garbage Collector/312

British company offers a licensing arrangement to manufacture and market its refuse collectors in Canada. The firm also offers the possibility of export rights to third countries (including the U.S.A.). The product is an all-steel intermittent compaction rear-loading refuse collector designed to fit a wide variety of truck chassis. The body is available in 12.2 m^3, 15.0 m^3 and 17.8 m^3 net usable airspace with corresponding nominal capacities for typical refuse of 5.7, 7.0 and 8.3 tonnes respectively. The principal features of this product include reduced fuel consumption, modular hydraulic and electrical systems for easy maintenance, reduced down time, improved weight distribution and safety to the operators. (See illustration page 39.) Write: Hestair Eagle Export Limited, The Saltisford, Warwick CV34 5XW, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Benne à ordures/312

Une compagnie britannique offre des possibilités de fabrications sous licence et de commercialisation de bennes à ordures pour le Canada. La firme offre également une possibilité d'obtenir des droits d'exploitation dans d'autres pays (y compris les États-Unis). Il s'agit d'une benne à ordures entièrement en acier à chargement par l'arrière avec dispositif de compaction intermittente. Cette benne peut être montée sur une grande variété de châssis de camions. L'espace utilisable est de 12.2 m^3, 15.0 m^3 ou 17.8 m^3 avec des capacités nominales correspondantes pour les ordures typiques, de 5.7, 7.0 et 8.3 tonnes respectivement. Les caractéristiques principales de cette benne sont une consommation réduite, des circuits hydrauliques et électriques modulaires pour faciliter l'entretien, une réduction du temps d'immobilisation, l'amélioration de la distribution du poids et une sécurité d'emploi pour les opérateurs. (Voir l'illustration page 39.) Écrire à: Hestair Eagle Export Limited, The Saltisford, Warwick CV34 5XW (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commissariat du Canada, 1 Grosvenor Square, Londres W1X 0AB (Angleterre).

Fluid Cushion Handling Equipment/312

East German foreign trade organization offers the licensing rights in Canada for the production of fluid cushion handling equipment designed for lifting and lowering heavy loads, as well as moving them sideways in a process of suspension and sliding. The floating or sliding is accomplished by the use of air enriched with oil and a hydraulic lift system. The movement, with the minimum of noise, of the following is possible: transformers, blast furnaces, bridges, etc. The operation uses a rubber slideway, is clean, and does not require floor renewal or straightening for its installation. The licensor will supply complete documentation in German and specialists for technical training. Write: VEB Transformatorenwerk, Karl Liebknecht, Wilhelminenhofstr. 83-85, 116 Berlin, German Democratic Republic and send a copy of your initial correspondence to 1) Mr. Fritz Zscherning, General Director, Marketing & Development Department, The Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, German Democratic Republic and 2) Commercial Division, Canadian Embassy, Matejki 1/5, Srodmiescle, Warsaw, Poland.

Équipement de manutention à coussin liquide/312

Une entreprise commerciale est-allemande offre les droits de fabrication au Canada d'un équipement de manutention à coussin liquide conçu pour le levage, la descente ou le déplacement latéral au moyen d'un procédé d'accrochage et de glissement, de charges lourdes. Le glissement de la charge est rendu possible par l'utilisation d'air additionné d'huile et d'un système de levage hydraulique. L'équipement peut déplacer, avec un minimum de bruit, des transformateurs, des hauts fourneaux, des ponts, etc. Il fonctionne à l'aide d'une glissière caoutchoutée sans produire de saletés et son installation ne nécessite pas le remplacement si le redressement de la surface de montage. L'entreprise s'engage à fournir toute la documentation en allemand et les spécialistes chargés de la formation technique. Écrire à: VEB Transformatorenwerk, Karl Liebknecht, Wilhelminenhofstr. 83-85, 116 Berlin, République démocratique d'Allemagne et faire parvenir une copie de votre correspondance initiale à 1) M. Fritz Zscherning, General Director, Marketing and Development Department, the Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, République démocratique d'Allemagne et à 2) Division commerciale, Ambassade du Canada, Matejki 1/5, Srodmiescle, Varsovie, Pologne.

Tire Pressure Regulating Device/312

Engineer and owner of several patented inventions offers the outright sale of his rights to a small device which forms part of the standard hub cap fitted on automobile wheels. The device will automatically maintain optimum pressure in the tire while the car is in motion and thus save a considerable amount of fuel and give higher mileage. It is encased in a housing attached to the hub of the wheel, consists of a pneumatic pump, a cam and a counterweight. To maintain a predetermined pressure, the pump supplies air via an air pressure regulator. When the airpressure exceeds a predetermined level, it is vented to the outside. The device will help in comfortable and safe driving by eliminating bumping caused due to higher tire pressure. It will increase tire life and substantially eliminate cumbersome and regularly repeated manual checking and re-pressuring of tires. Write: Mr. C.V. Venugopalan, Sai Sadan, D. Heerachand Road, Cox Town, Bangalore 560 005, South India and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, P.O. Box 5208, Shanti Path, Chanakyapuri, New Delhi 11021, India.

Régulateur de pression de pneu/312

Un ingénieur ayant à son actif plusieurs inventions brevetées cherche à vendre à forfait ses droits d'exploitation d'un petit dispositif qui fait partie intégrante de l'enjoliveur de roue standard d'automobile. Le dispositif maintient automatiquement la pression optimale dans le pneu lorsque l'automobile roule et permet ainsi d'économiser une quantité considérable d'essence et d'augmenter le kilométrage. Il est logé dans un boîtier fixé au moyeu de la roue et est composé d'une pompe de gonflage, d'une came et d'un contrepoids. Pour conserver une pression établie, la pompe fournit de l'air par l'intermédiaire d'un régulateur de pression. Lorsque la pression excède une valeur préétablie, elle est mise à l'air libre. Le dispositif contribue à une conduite confortable et sans danger en éliminant les secousses causées par une pression excessive. Il permet de prolonger la durée de vie du pneu et élimine considérablement les vérifications manuelles, désagréables et répétées, ainsi que le gonflage des pneus. Écrire à: M. C.V. Venugopalan, Sai Sadan, D. Heerachand Road, Cox Town, Bangalore 560 005 (Inde du Sud) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commissariat du Canada, C.P. 5208, Shanti Path, Chanakyapuri, New Delhi 110021 (Inde).

Digital Speech Processor/312

British company offers an exclusive manufacturing and marketing license for its precision speech level controller for carrier speech communications and voice communication systems. This equipment uses high speed digital technology to sample and process the speech waveform to provide precise peak amplitude control, waveform compression and background noise reduction. The processors can be used with V.H.F. and U.H.F. radio communications, loudhailers, intercom systems, and personal paging systems. Interested

Dispositif numérique de traitement de la parole/312

Une compagnie britannique offre une licence exclusive de fabrication et de mise en marché pour un contrôleur précis du niveau de la parole, destiné aux communications de la parole par porteuse et par systèmes téléphoniques. L'appareil utilise la technologie numérique à grande vitesse pour échantillonner et traiter la forme d'onde de la voix, de façon à assurer avec précision la commande et l'amplitude de crête, la compression de la forme d'onde et la réduction du bruit de fond. Les processeurs peuvent servir avec des pos-

manufacturer must be fully established in the manufacture and supply of radio communications equipment. Write: Voice Microsystems Ltd., Abercynon, Mountain Ash, Mid Glamorgan, South Wales CF45 4SF, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

tes de radiocommunications UHF ou VHF, des porte-voix électroniques, des systèmes d'interphones et des systèmes de téléappel personnels. Le fabricant intéressé doit être déjà bien établi dans la fabrication et la fourniture de matériel de radiocommunications. Écrire à: Voice Microsystems Ltd., Abercynon, Mountain Ash, Mid Glamorgan, South Wales CF45 4SF (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commissariat du Canada, 1 Grosvenor Square, Londres, W1X 0AB (Angleterre).

Sliding Rifle Rest/312

American inventor offers licensing rights for an adjustable device for bench rest shooting, for changing point of aim and can also be used as an attractive display stand. It is made of wood and includes front and rear stocks. There is no need to hand support the front stock. Sight setting is both accurate and convenient. the device is lightweight weighs only 2.251 Kg, is durable, has a weather-tested finish and is humidity resistant. A patent is pending. (See illustration page 39.) Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Support de carabine coulissant/312

Un inventeur américain offre les droits sous licence pour un dispositif réglable avec appui et point de viser variable. Il peut être également utilisé comme support décoratif. Cet appui est fait de bois et comprend un support avant et un support arrière. Il n'est pas nécessaire de soutenir le fût à l'avant. Le réglage de visée est précis et pratique. Le dispositif est léger et ne pèse que 2.251 kg. Il est durable, il a un fini à l'épreuve des intempéries et résiste à l'humidité. Le brevet est actuellement en instance. (Voir l'illustration page 39.) Écrire à: Mme Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Cable Delivery System/312

East German foreign trade organization offers the licensing rights in Canada to its cable delivery system for handling light and heavy cables in diameters of 30 mm to 100 mm. Particularly designed for laying oil-filled cables, the system is used in sophisticated routes in which the tensile forces, in applying the cable peak pull, are exceeded. It may also be used in buildings and canals where the use of cable prime movers is not permissible. A technological advantage is that longer laying sections may be made thus reducing the number of sleeves used. The system is designed so that up to five sub-distributions can be connected to one main distribution center. Up to five delivery devices can be connected with plugs to each sub-distribution. Thus, a delivery track of 625 m can be arranged. The delivery width per device amounts to 25 m. The system is controlled via the sub-distribution centre; the device chain can be disconnected from each sub-distribution (emergency-OFF); has a forward and reverse movement; cable shifting is possible; and a uniform movement of all devices is guaranteed. The actual cable delivery device consists of a tabular frame with supporting feet accommodating the driving motor and gearing. Four delivery rollers are driven via chains. The delivery rollers are metal half shells which are opposed convexly. The cable is pressed on the delivery rollers by two pressure rollers, with sufficient friction developing between the delivery rollers and the cable to initiate delivery of the cable. Write: VEB Starkstrom-Anlagenbau, Leipzig-Halle, Humboldstr. 2a, 701 Leipzig, German Democratic Republic and send a copy of your initial correspondence to 1) Mr. Fritz Zscherning, General Director, Marketing & Development Department, The Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, Ger-

Système de distribution de câbles/312

Une entreprise commerciale est-allemande offre au Canada les droits d'exploitation d'un système de distribution de câbles permettant la manutention de câbles légers et lourds dont le diamètre varie de 30 à 100 mm. Conçu spécialement pour la pose de câbles remplis d'huile, le système se prête aux tracés compliqués où la traction exercée sur les câbles est supérieure à la limite tolérée. Il peut également être utilisé dans les édifices et les caniveaux où l'installation d'une machine d'entraînement de câbles n'est pas autorisée. En permettant la pose de sections de câble plus longues, le système réduit le nombre de fourreaux nécessaires. Il est conçu de façon à permettre l'utilisation de cinq appareils de distribution secondaires reliés à un appareil principal. Chaque appareil secondaire peut être branché à l'aide de fiches, à un maximum de cinq dispositifs de distribution. Il est ainsi possible d'aménager une voie de distribution de 625 m. La largeur de distribution de chaque dispositif atteint 25 m. Le système est commandé par l'intermédiaire du centre de distribution secondaire. La chaîne d'entraînement des dispositifs peut être désaccouplée d'urgence de n'importe lequel des appareils secondaires. Il peut fonctionner en marche avant ou en marche arrière et tous les appareils sont synchronisés dans leur mouvement. Il est également possible de passer d'un type de câble à l'autre. L'appareil de distribution de câble en soi est composé d'un moteur d'entraînement et d'un engrenage montés sur un cadre tubulaire muni de pieds. Quatre galets de distribution entraînés par chaîne sont constitués de demi-coquilles métalliques, opposées côté connexe. Le câble est appuyé contre les galets de distribution au moyen de galets de pression. Le frottement qui se produit alors entre le câble et les galets de distribution est suffisant pour entraîner le câble. Écrire

man Democratic Republic and 2) Commercial Division, Canadian Embassy, Matejki 1/5, Srodmiescle, Warsaw, Poland.

Hydraulic Cable Layer/312

East German foreign trade organization offers the licensing rights in Canada to its hydraulic cable layer which overcomes the disadvantages of laying curved route cables by permitting the cable to pull in any position radius and to place the cable mechanically into the final position. The equipment can be disassembled into three parts and transported easily. Cable shifting is rendered possible by a hydraulically disengageable carriage. Write: VEB Starkstrom-Anlagenbau, Leipzig-Halle, Humboldstr. 2a, 701 Leipzig, German Democratic Republic and send a copy of your initial correspondence to 1) Mr. Fritz Zscherning, General Director, Marketing & Development Department, The Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, German Democratic Republic and 2) Commercial Division, Canadian Embassy, Matejki 1/5, Srodmiescle, Warsaw, Poland.

Jar Lid/312

American inventor offers the licensing rights in Canada for his canning jar lid. TATTLER can be used with any ordinary screw band and is available for either regular or widemouth jars. The plastic jar lid is neat, clean and dishwasher safe. It prevents flaking, peeling and rusting that is usually found on metal lids when the jar is open. TATTLER is also safe for use in pressure cookers or with water bath methods of canning. Independent laboratory testing results are available on request. Molds for these units are also available. Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Emergency Folding Ladder/312

Two Canadian inventors offer the Canadian manufacturing and worldwide marketing rights on their patented folding, collapsible ladder assembly designed for exit from two or three storey homes in emergency situations. The rungs are made of extruded aluminum. The folding mechanism is made of steel and is stored inside the rungs when the ladder is folded with each non-slip rung resting on top of each other. The positive extension allows the ladder, designed to be produced in 4.5 m and 7.5 m lengths, to drop instantly under its own weight; the universal clamp and hand post will fit the windows of most North American homes and will

à: VEB Starkstrom-Anlagenbau, Leipzig-Halle, Humboldstr. 2a, 701 Leipzig, République démocratique d'Allemagne et faire parvenir une copie de votre correspondance initiale à 1) Monsieur Fritz Zscherning, General Director, Marketing and Development Department, The Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, République démocratique d'Allemagne et à 2) Division commerciale, Ambassade du Canada, Matejki 1/5, Srodmiescle, Varsovie, Pologne.

Appareil de pose de câbles hydraulique/312

Une entreprise commerciale est-allemande offre les droits d'exploitation au Canada d'un appareil de pose de câbles hydraulique qui facilite la pose des câbles le long de routes sinueuses, en laissant le câble tirer dans tous les sens et en le plaçant mécaniquement dans sa position finale. Le matériel est démontable en trois parties et est facile à transporter. Le passage d'un câble à l'autre est possible grâce à un chariot qui se déclenche hydrauliquement. Écrire à: VEB Starkstrom-Anlagenbau, Leipzig-Halle, Humboldstr. 2a, 701 Leipzig, République démocratique allemande et faire parvenir une copie de la correspondance initiale à 1) Mr. Fritz Zscherning, General Director Marketing & Development, The Central Office of International License Commerce of the G.D.R., Schicklerstr. 57, 102 Berlin, République démocratique d'Allemagne et à 2) Division commerciale, Ambassade du Canada, Matejki 1/5, Srodmiescle, Varsovie, Pologne.

Couvercle de bocal/312

Un inventeur américain offre les droits de licence au Canada touchant un couvercle de bocal de mise en conserve. Le couvercle TATTLER s'adapte à tout bocal de modèle courant à couvercle vissable, en modèle pour ouverture ordinaire ou grande. Fait de matière plastique, il est esthétique, propre et lavable à la machine. Au contraire du couvercle métallique, il empêche la formation d'écailles, de pellicule et de rouille. Le couvercle TATTLER peut aussi être utilisé dans les autoclaves et les bains-marie. Il est possible d'obtenir sur demande les résultats d'essais réalisés dans un laboratoire indépendant, ainsi que les moules nécessaires. Écrire à: M^{me} Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Échelle de secours repliable/312

Deux inventeurs canadiens offrent les droits de commercialisation et de fabrication pur une échelle repliable brevetée, conçue comme issue de secours pour les maisons de deux à trois étages. Les échelons sont faits d'aluminium extrudé. Le mécanisme de repliage est en acier et s'escamote à l'intérieur des échelons quand l'échelle est repliée, chacun des échelons antidérapants s'emboîtant l'un sur l'autre. L'échelle se vend pour des longueurs de 4.5 m et 7.5 m (dépliée) et descend instantanément par son propre poids. La fixation universelle et la main courante s'accrochent à la plupart des fenêtres des maisons nord-

hold 450 kg while being used by more than one person. (See illustration page 39.) Write: Mr. Paul Arato, 180 Duncan Mill Road, Don Mills, Ontario M3B 1Z6 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Wrestling Game/312

American inventor offers a board game with a wrestling theme for manufacture under license in Canada. Developed by a wrestling coach, GRAPPLER builds familiarity with wrestling terms and is designed for individual or team play, ages 11 to adult. It can be adapted to high school, college or olympic wrestling. The game includes dice, outcome sheets, individual/team score sheets and time or riding time sheets. Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Storage Unit/312

American inventor offers licensing rights in Canada for his plastic storage unit for home, restaurant or lounge use which is currently being introduced into the market. STORE-MORE is made of a durable polypropylene that wipes clean. The 30 cm x 16.9 cm x 8.75 cm unit is easy to install with screws. The push/pull towel holders positioned on two sides keep cloths in place. STORE-MORE is available in a variety of colors. It can be attached to any flat surface including counters, walls and doors. STORE-MORE can be mounted vertically or horizontally and can be used as an extra shelf wherever needed. Molds for the units are available. Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Car Desk/312

American inventor offers for licensing in Canada a portable desk or storage unit for a car. Measuring 56.25 cm x 37.5 cm x 15 cm, the KAR DESK has a recess for a pen or pencil to prevent rolling while driving, two beverage container holders, a flat writing surface measuring 22.225 cm x 55.88 cm (8¾" x 22"), and a hinged top which opens to store forms, papers, maps or receipts. The unit is made from a mold of durable polystyrene construction that is easily cleaned with soap and water. It has an elastic strap to secure it and the bottom fits the contour of a bench seat. KAR DESK is also furnished with a spring clip to secure papers. Molds for these units are available. Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated,

américaines et l'échelle peut supporter 450 kg tout en étant utilisée par plus d'une personne. (Voir l'illustration page 39.) Écrire à: M. Paul Arato, 180 Duncan Mill Road, Don Mills (Ontario) M3B 1Z6 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.

Jeu de lutte/312

Un inventeur américain offre la licence de fabrication d'un jeu inspiré de la lutte, le jeu GRAPPLER. S'adressant aux personnes âgées de 11 ans et plus, il a été mis au point par un entraîneur spécialisé dans le domaine de la lutte et permet de se familiariser avec les termes employés dans ce sport; les adversaires peuvent jouer séparément ou former des équipes. Il s'adapte aux règlements de la lutte aux niveaux secondaire et collégial et à ceux des jeux olympiques. Il comprend des dés, des feuillets pour inscrire les points (par joueur et par équipe), les résultats et l'ordre des combats. Écrire à: Mme Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburg (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Bloc de rangement/312

Un inventeur américain offre les droits de licence pour son bloc de rangement en matière plastique utilisable dans la maison, les restaurants et les salons-bars, et qui vient d'être mis sur le marché. Le bloc STORE-MORE est fait de polypropylène solide qui se nettoie avec un simple chiffon; aisément vissable, il mesure 30 cm x 16.9 cm x 8.75 cm. Logés sur deux côtés, les porte-serviettes maintiennent bien le linge en place. Le bloc de rangement STORE-MORE est vendu en plusieurs couleurs. Il peut être monté sur toute surface plane, y compris les comptoirs, les murs et les portes, verticalement ou horizontalement, et peut également servir d'étagère supplémentaire. Les moules sont disponibles. Écrire à: M^{me} Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Pupitre de voiture/312

Un inventeur américain offre la licence pour le Canada pour un pupitre ou bloc de rangement portatif pour voiture. Le dispositif KAR DESK mesure 56.25 cm x 37.5 cm x 15 cm, il comporte une cavité pour mettre les stylos et les crayons et les empêcher de rouler pendant la conduite. Il a également deux supports pour tasses, une surface plate pour écrire mesurant 22.225 cm x 55.88 cm (8¾ x 22 po) et un dessus à charnière qui s'ouvre pour permettre de ranger les papiers, les cartes ou les reçus. Le dispositif est en polystyrène moulé, durable et facile à nettoyer à l'eau et au savon. Il a une bride élastique pour permettre la fixation et le fond épouse la forme du siège banquette. Le dispositif KAR DESK comprend également une patte à ressort pour tenir

Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

les papiers. Les moules pour ces dispositifs sont disponibles. Écrire à: M^me^ Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Game/312

Two American inventors offer the Canadian manufacturing and marketing rights to an international oil game which has recently been introduced on the American market. It includes a full-colour 55 cm x 55 cm gameboard, fortune and disaster cards, markers, playing pieces, "barrels of oil" certificates, petro-dollars and rules and instructions. Designed for two to six people, ages eight to adult, the cards instruct players to invest in oil fields, compete for control and offer experiences in profit and disaster situations. (See illustration page 40.) Write: Ms. Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, Pennsylvania 15222 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Jeu/312

Deux inventeurs américains offrent aux sociétés canadiennes les droits de fabrication et de commercialisation d'un jeu de monopole pétrolier international récemment lancé sur le marché américain. Le jeu se compose d'une planche couleurs de 55 cm sur 55 cm, de cartes d'événements heureux et désastreux, de marqueurs, de pions, de titres de "barils de pétrole", de pétrodollars, de règles et d'un feuillet d'instructions. De deux à six joueurs de huit ans et plus peuvent y jouer. Les cartes dictent aux joueurs dans quels champs de pétrole investir, de s'opposer pour accroître leur puissance ou encore leur font subir des événements heureux ou désastreux (Voir l'illustration page 40.) Écrire à: M^me^ Marilyn Ziegler, Invention Marketing Incorporated, Triangle Building, 701 Smithfield Street, Pittsburgh, (Pennsylvanie) 15222 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113-1983 (É.-U.).

Canadian Patents Available for Licensing or Sale in Canada Issued November 1981

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

Method of Manufacturing a Hollow Panel by Uniting Vitreous Sheets by Means of a Spacer of Synthetic Polymeric Material Located Between and Adherent to Margins of the Sheets and Spacer Materials for Such Panels/312

A hollow panel is prepared by uniting vitreous sheets by a spacer of synthetic polymeric material between the sheets. Preferably the polymeric material is a mixture including two polymers of substantially different molecular weight. A ribbon made of the polymeric composition is also disclosed. **PATENT 1,111,621.** Write: BFG Glassgroup, Rue Caumartin, 43, Paris, France and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, 35 Avenue Montaigne, 75008 Paris, France.

Optic Fiber Connector/312

L'invention concerne un connecteur pour fibre optique. Un court segment de fibre de diamètre connu avec précision et maintenu dans le connecteur est raccordé par soudure à l'extrémité d'une fibre de transmission de grande longueur. Applications aux télécommunications. **BREVET 1,111,688.** Écrire à: Compagnie Générale d'Électricité, 54, rue la Boétie, 75382 Paris, Cédex 08, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Mechanical Connector for Optical Fibers/312

Dispositif mécanique de raccordement de fibres optiques entre elles permettant des connexions monojonction ou multijonction à faible pertes d'atténuation. Le connecteur comprend un corps en forme de couronne, des embouts supportant trois tiges cylindriques enfermant la fibre et disposées dans des vé de guidage, des capuchons associés aux embouts par des rondelles élastiques permettant l'encliquetage longitudinal du capuchon sur le corps, et une lame déformable appuyant transversalement sur les tiges. Applications aux fibres optiques. **BREVET 1,111,689.** Écrire à: 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.

Coupling Device for Optic Fibers/312

L'invention concerne un dispositif de couplage pour fibre optique. Des moyens de couplage de modes par courbures alternées de la fibre sont associés à un adaptateur d'indice entourant la fibre et parcouru par un ensemble de rayons lumineux faisant tous un même angle avec l'axe de celle-ci, et cet adaptateur est muni d'une surface optique conique pour faire correspondre un faisceau parallèle à cet ensemble de rayons. Application aux télécommunications. **BREVET 1,111,690.** Écrire à: Compagnie Générale d'Électricité, 54, rue la Boétie, 75382 Paris, Cédex 08, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Pet Walker/312

A colorful stake to which a leash of a dog or other pet can be tethered so as to not run off: the stake including a metal prong for insertion into the ground, a flat plate freely pivotable around an above-ground portion of the prong, the plate being imprinted with a design of a person with a hand pictured around an actual ring formed on the plate and to which the leash

Liste des brevets canadiens disponibles pour octroi de licence ou vente au Canada délivrés en novembre 1981

Note:
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Méthode de fabrication d'un panneau creux par juxtaposition de carreaux vitreux à l'aide d'un adhésif d'emplissage synthétique polymérisé, et l'adhésif comme tel/312

Connecteur pour fibre optique/312

Dispositif mécanique de raccordement de fibres optiques/312

Dispositif de couplage pour fibre optique/312

Dispositif pour promener un animal familier/312

is attached, the plate additionally having a space where the name of the pet or any other text can be written. **PATENT 1,111,727**. Write: Jimmy Cowan, c/o George Spector, 3615 Woolworth Building, 233 Broadway, New York, New York 10007 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, New York 10020, U.S.A.

Vertical Stem/Liquid Mix Separator/312

Séparateur vertical d'un mélange de vapeur et de liquide/312

Séparateur vertical d'un mélange vapeur-liquide comprenant dans une virole externe une enceinte d'admission du mélange vapeur-liquide, des tubes verticaux munis à laur entrée d'aubes fixes imprimant au mélange un mouvement hélicoïdal, et à leur sortie d'un tube coaxial de plus faible diamètre permettant dans son conduit interne l'évacuation de vapeur sèche et dans l'espace annulaire celle d'un mélange plus riche en liquide, ledit espace annulaire débouchant dans un volume libre où ledit mélange plus riche en liquide se sépare en une vapeur sèche et un liquide encore chargé de vapeur, et lesdits conduits internes débouchant dans une chambre de recueil de vapeur sèche. Il comporte un rebord annulaire permettant à la vapeur subsistant dans le liquide de s'échapper vers le haut par un passage annulaire périphérique entre le rebord annulaire et la virole externe. **BREVET 1,111,789**. Écrire à: Stein Industrie, 19-21, avenue Morane Saulnier, B.P. 74, 78140 Velizy Villacoublay, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Device for Inserting Closing Resistors in a High Voltage Circuit Breaker/312

Dispositif d'insertion de résistances de fermeture pour disjoncteur haute tension/312

Disjoncteur à haute tension comprenant, au moins deux chambres de coupure disposées en série, lesdites chambres étant remplies d'un fluide diélectrique et enfermant des contacts principaux séparables, une tige de manoeuvre interposée entre lesdites chambres de coupure, des chambres auxiliaires s'étendant parallèlement auxdites chambres de coupure et disposées du côté opposé au trajet de la tige de manoeuvre, chaque chambre auxiliaire contenant une résistance de fermeture, des contacts fixes connectés auxdites résistances, un pont mobile associé à la tige de manoeuvre par des moyens d'entraînement et portant des contacts mobiles pour relier les contacts fixes de manière à connecter les résistances en série et shunter ainsi les contacts principaux, caractérisé en ce que la tige de manoeuvre porte un organe de commande d'ouverture et de fermeture des contacts principaux et qu'il comprend en outre une chambre intermédiaire, disposée entre les chambres auxiliaires, contenant lesdits contacts auxiliaires ainsi que le pont mobile, un organe pour déplacer la tige dans une direction donnée afin d'effectuer la liaison des contacts auxiliaires par le pont mobile, puis la fermeture des contacts principaux et ensuite pour que le pont mobile quitte les contacts auxiliaires pendant le mouvement subséquent de la tige. **BREVET 1,111,885**. Écrire à: Delle-Alsthom, 130, rue Léon Blum, 69330 Villeurbanne, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Gas Discharge Lamp Employing a Pulse Generator with a Double Step Amplification Circuit/312

Lampe à décharge gazeuse utilisant un générateur d'impulsions à circuit d'amplification à deux étages/312

A solid state ballast circuit for a discharge lamp includes a transistor oscillator with a current amplifier connected to a transformer one secondary winding of which is coupled to the amplifier input. An inductive choke coil is connected in the power circuit of the amplifier so that when the lamp burns out, or is removed, the operating frequency increase resulting from the decrease in load circuit capacitance, results in an increase in impedance of the choke, drastically reducing current flow through the amplifier power circuit to prevent transistor damage or RF interference radiation. The current amplifier disclosed is a two-stage emitter follower circuit. **PATENT 1,111,901**. Write: Guido Arena, Colina de la Ilusion No. 49, Fracc. Bulevares, Ciudadsatélite Edo. de Mexico, Mexico and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Apartado Postal 105-05, Mexico, 5 D.F., Mexico.

Control System Using Time Division Multiplexing/312

Système de commande à multiplexage temporel/312

A control system for selectively communicating a plurality of sensors with associated remote control devices includes a Master Synchronizer, a transmitter for each sensor and a receiver for each control device. A single signal line is connected to all transmitters and receivers, and a single synchronization line couples the Master Synchronizer to all transmitters and receivers. The Master Synchronizer generates a time frame signal which has a reset portion for resetting all transmitters and receivers synchronously at the start of each frame, and a periodic portion which determines the time slots for each frame and which decrements counters in all transmitters and receivers synchronously. A time division multiplex system is used to communicate each transmitter with one or more associated receivers during a predetermined time slot of a periodic time frame determined by the Master Synchronizer. At the beginning of each frame, all counters are set to a predetermined number representative of the time slot allocated to those units. When their counters are decremented

to zero, a time slot is defined for communicating a transmitter with its associated receiver or receivers. Thus a transmitter is permitted to send a signal along the signal line which causes a response only in the receiver whose counter has been decremented to zero during the same time slot. A decrementing counter in the Master Synchronizer defines the complete time frame; and when it reaches zero, the transmission of sync pulses to all transmitters and receivers is inhibited for a predetermined time. This absence of sync pulses is used to reset the Master Synchronizer and all transmitters and receivers at the start of each frame. An energy-containing signal, rather than the absence of a signal, is required to activate a control device. **PATENT 1,111,972**. Write: Charles E. Moreland, 2210 Hassell Road, Apt. 209, Hoffman Estates, Illinois 60195 and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

Soft Surface Magnetic Clamping Board for Garment-Type Patterns/312

Table magnétique à surface lisse pour la fixation des patrons de découpage de l'industrie vestimentaire/312

A pattern cutting board is provided which facilitates the cutting of textile material according to paper patterns for fabrication of garments. The cutting board contains integrally attached magnetically attractable material, allowing the textile and the pattern piece to be held in place on the board by magnetic objects. The cutting board is foldable for easy storage. Also patterns and fabrics may be stored indefinitely on the cutting board in its open position. **PATENT 1,112,036**. Write: Betty Johnson, 1928 Annin Street Philadelphia, Pennsylvania 19146 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Heat Recovering System for Internal Combustion Engines/312

Récupérateur de chaleur sur moteur à combustion interne/312

More than 60% of the heating value of the fuel consumed in the usual internal combustion engines is wasted past remedy. The present invention, which is applicable in combination with any kind of internal combustion engine, and especially with fuel injection engines of the compression-ignition and of the spark-ignition types, is intended to reduce the heat losses and to improve the thermodynamic cycles by making practicable the increase of the compression ratio. Besides, a reduction of the emission of pollutants is achieved. The invention embodies various energy saving systems including: apparatus to generate superheated pressure steam, an injector-compressor apparatus utilizing the generated steam as motive power and serving to pre-compress the combustion air, a jacketed cooling system of the engine through which the compressed air-steam mixture delivered by the injector-compressor flows serving as a coolant, said mixture being thereby conveniently superheated and being rammed into the engine's combustion space by virtue of its pressure, and a feasibly complete thermal insulation system. The invention offers the advantage of reducing the usual heat losses to the only heat being rejected with the cooled exhaust gases. **PATENT 1,112,055**. Write: John J. Haiman, 20 Chesterton Drive, Apartment 408, Nepean, Ontario K2E 6Z7 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Solar Energy Collection/312

Captage de l'énergie solaire/312

Apparatus and methods for concentrating and collecting solar energy and for lowering the cost and increasing the efficiency of solar energy systems are disclosed. In one embodiment apparatus for collecting and concentrating solar energy is disclosed which comprises a collector including a plurality of elongated conduits each containing a fluid therein. The conduits are arranged such that at least two fluids in the conduits are contiguous. The apparatus includes a fluid lens for concentrating the solar energy along an elongated focus at the collector located substantially in or on and substantially along at least one of the conduits. The fluid lens comprises a solar-energy transmitting lens fluid and opposed solar energy transmitting plates enclosing the lens fluid, the lens plates being spaced and the lens fluid being chosen to absorb a minimum amount of infrared solar energy. **PATENT 1,112,118**. Write: Virgil Stark, 936 Fifth Avenue, New York, New York 10021 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020-1175, U.S.A.

Veterinary Composition/312

Composition vétérinaire/312

Composition vétérinaire pour la prévention du syndrome des voies urinaires des félins. Cette composition est caractérisée en ce qu'elle renferme en pourcentage exprimé en poids par rapport au poids total, de 25 à 75% de poudre de plante verte, de 15 à 45% d'un acidifiant urinaire, de 9.5 à 28.5% d'un agent diurétique doux, et de 0.5 à 1.5% d'un agent chélateur de calcium. Un nouveau moyen d'administration d'une telle composition vétérinaire à un animal est également décrit, lequel consiste en une litière vétérinaire comprenant des particules composées de bois ou d'un sous-produit du bois et recouvertes d'une composition telle que définie ci-dessus, à raison d'une quantité variant entre 0.1 et 4% en poids par rapport au poids total des particules. L'avantage majeur de cette litière dont les particules sont recouvertes d'une pellicule médicamentée est que l'animal, sans s'en rendre compte, imprègne ses pattes, une partie de son poil et son museau de médicament et l'absorbe inconsciemment en lèchant ses pattes et son pelage lorsqu'il procède à sa toilette. **BREVET 1,112,169.**

Écrire à: Marc Vaillancourt, 5735, rue Terrebonne, Notre-Dame-de-Grâce, Montréal, Québec H4A 1A9 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licenses (34/3), Centre des entreprises, Ministère de l'Industrie et du Commerce, Ottawa, Ontario K1A 0H5.

Antibacterial Textile Finishes Utilizing Zinc Acetate and Hydrogen Peroxide/312

Finis antibactériens pour textiles, comprenant de l'acétate de zinc et du péroxyde d'hydrogène/312

The preparation of bacteriostatic, water-insoluble peroxide-containing complexes of zinc acetate, by reaction of zinc acetate with hydrogen peroxide in the presence of acetic acid, is disclosed. A process for in situ formation and deposition of these complexes on cellulosic and polyester textiles is described. The textile finishes so produced inhibit the growth and spreading of odor- and infection-producing gram-positive and gram-negative bacteria on the treated textiles. The antibacterial activity of the finished textiles is durable to repeated textiles. The antibacterial activity of the finished textiles is durable to repeated launderings. **PATENT 1,112,250**. Write: The Secretary, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

Method of Meat Tenderizing/312

Méthode pour attendrir la viande/312

"Method of Meat Tenderizing", is a tenderizing process in which a calculated amount of wine or spirits, relative to the size of the dead animal i.e., rabbit, sheep, cattle, swine, horse, deer, moose and the like is injected into the vascular system under pressure from a pump apparatus when the animal is in a post mortem state of primary flacidity and prior to any debleeding or mutilation of parts via a major artery and the intravascular pressure is allowed to build until the venous system is distended and at that point a major vein is opened and allowed to drain. The solution is continually pumped through the vascular system until all the blood is flushed from the system. The process is completed once the arterial, capilliary and venous systems are flushed and saturated with wine or spirits and the animal is eviscerated and the carcass is allowed to hang at 38°F, while the wine or spirits is allowed to react on the tissue resulting in a thorough tenderizing of the meat for eatable purposes. **PATENT 1,112,507**. Write: Thomas C. Easthope, 41 Kootenay Crescent, Scarborough, Ontario M1J 1R8 and Robert R. Martin, box 1718, Campbellford, Ontario K0L 1L0 and send a copy of your initial correspondence to the Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

Coin Freed Vending Machines/312

Distributeur activé par monnaies ou jetons/312

A coin freed vending machine for coins and/or goods, which comprises a coin acceptance device co-acting with a stop device to provide anti-cheat means, the coin acceptance device consisting of a coin bucket mounted on one end of a see-saw member, the other end of which is provided to co-act with the stop device to prevent unauthorised movement of a slide or drawer for delivering the coins and/or goods. The machine also includes coin lock-out means to prevent jamming of the machine with coins in excess of requirements, and also a coin hopper to facilitate filling of one or more coin storage tubes. **PATENT 1,112,613**. Write: Terence T. Ketteringham, 7 St. Augustines Road, Wisbech, Cambridgeshire, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Electromagnetic Relay with Two Biasing Springs/312

Relais électromagnétique avec deux ressorts de rappel/312

Relais électromagnétique à haute sensibilité comportant une palette mobile s'appliquant sur deux pièces polaires d'un circuit magnétique sous l'action du champ d'un aimant permanent caractérisé en ce que la palette est soumise à l'action de deux ressorts de rappel agissant dans le sens du décollage de la palette, à savoir un premier ressort non réglable et un deuxième ressort réglable les deux ressorts étant indépendants l'un de l'autre mais agissant conjointement. **BREVET 1,112,692**. Écrire à: Société d'Appareillage Électrique Saparel, 38160 Saint-Marcellin, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

Electric Cable with Linear Support System/312

Câble électrique à élément porteur longitudinal/312

Câble électrique coaxial, comprenant au moins un conducteur central, entouré d'un isolant électrique, d'un conducteur externe et d'une gaine isolante, et comportant en outre des cordes longitudinales en fibres de polyamide aromatique agglomérées par une résine, caractérisé en ce que les cordes longitudinales sont disposées entre le conducteur central et le conducteur externe et noyées dans l'isolant électrique. **BREVET 1,112,733**. Écrire à: 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.

Liquid Crystal Acousto-Optic Cell/312

Cellule acousto-optique à cristal liquide/312

L'invention a trait à une cellule acousto-optique utile dans les dispositifs d'imagerie et d'holographie acoustiques. La cellule comporte une couche d'un cristal liquide qui possède des molécules réorientables sous l'action d'une onde ultrasonore. Des parois stratifiées comportant chacune au moins deux couches transparentes à cette onde ultrasonore permettent un grand champ de variations de l'angle d'incidence de cette onde et contribuent à minimiser de façon substantielle les pertes acoustiques dans la cellule et à orienter les molécules du cristal liquide suivant un plan perpendiculaire à la direction de propagation de l'onde ultrasonore. En outre, la structure de la cellule acousto-optique est telle à éliminer presque totalement les réflections multiples de l'onde sonore entre ses parois. **BREVET 1,112,750**. Écrire à: Jean-Luc Dion, 3760, rue Montpellier, Trois-Rivières, Québec G8Y 3P2 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.

Humane Animal Trap/312

Piège humanitaire pour animaux/312

A humane animal trap includes a casing defined by upper and lower box-like sections, which are hingedly interconnected for telescoping together to a set position; springs biasing such sections apart to a sprung position; a latch mechanism for holding the upper and lower sections together in the set position; a pair of jaws hingedly mounted in the top of the upper section and connected to a trigger which is actuated by one of the jaws when an animal steps on the jaws for causing the latch mechanism to release the upper section, whereby the upper section moves upwardly relative to the lower section and the leg of the animal moves downwardly between the jaws; springs biasing the jaws to the closed position where resilient opposed edges of the jaws retain the leg of the animal without damaging the leg; and gates which slide partly together above the jaws when the trap is sprung to limit access to such jaws, whereby once trapped an animal cannot readily gain access to the jaws and escape. **PATENT 1,112,866**. Write: Edward Cesar, P.O. Box 334, Granum, Alberta T0L 1A0 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.

Hydrometallurgical Process for the Treatment of Oxides and Ferrites which Contain Iron and Other Metals/312

Traitement hydrométallurgique des oxydes et ferrites à teneur de fer et d'autres métaux/312

A hydrometallurgical process for the treatment of a raw material which contains iron and other metals, with a sulfuric acid solution, in order to dissolve the metals and to precipitate and separate the iron, the separated metal sulfate solution being exposed to evaporation in order to crystallize and separate the metal sulfates from the mother liquor, which is recycled to the treatment stage performed with sulfuric acid solution, and the separated metal sulfate being recovered. **PATENT 1,112,880**. Write: Outokumpu Oy, Toolonkatu 4, P.O. Box 280, SF-00101 Helsinki 10, Finland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Pohjois Esplanadi 25B, 00100 Helsinki, 10, Finland.

Boot Buckling Aid/312

Dispositif d'accrochage de boucles de bottes/312

A device for aiding the operation of boot buckles having a pivotally attached tensioning lever and a clamping loop, comprising an elongated member having a handle end and a second end having a socket therein adapted to receive the tensioning lever to facilitate the movement thereof when in engagement with the clamping loop. **PATENT 1,113,052**. Write: Carl A. White, 41 Woodland Drive, Fargo, North Dakota 58102 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078, U.S.A.

Sealing Member for Use in Well Shafts/312

Dispositif d'obturation de forages/312

A sealing member for use in well shafts. The sealing member comprises a hose which is mounted over a tube sleeve and is sealed at its ends relative thereto. At least one pipe carrying pressure water passes through said sleeve. The pressure water pipe is connected with a space between the sleeve and the hose, and the connection means includes a valve arranged to allow water to flow from the pressure water pipe to said space but not in the opposite direction. Through this arrangement the pressure water inside the space between the hose and the sleeve keeps said hose in sealing engagement against the wall of the well shaft. **PATENT 1,113,136**. Write: RP Rorprodukter AB, von Utfallsgatan 9, A, S-415 08 Goteborg, Sweden and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

Axial Coupling Post/312 **Borne de raccordement axial/312**

Borne de raccordement axial d'un fil conducteur dans lequel on utilise la rotation d'un étrier serre-fil pour coïncer le fil contre une barrette de raccordement. **BREVET 1,113,171**. Écrire à: CGEE Alsthom, 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.

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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
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Auxiliary Torque Back-Up Roll/312

Rouleau auxiliaire de couple supplémentaire/312

Filed February 26, 1981, by the Department of Agriculture. This invention generally relates to a veneer lathe and, more particularly, to an apparatus and method for applying supplemental torque to the outer periphery of a log. A power back-up roll for a rotary veneer lathe comprises a drive roller for applying a rotational force to the outer periphery of a log axially mounted on the veneer lathe, a controllable drive source for driving the roller and a servo-control system for maintaining the static friction between the roller and the log. In a preferred embodiment of the invention, the servocontrol system includes a first DC-generator tachometer for monitoring the peripheral speed of the log, a second DC-generator tachometer for monitoring the peripheral speed of the roller; and a feedback loop, operatively associated with the controllable drive source as well as the first and second tachometers, for matching the peripheral speed of the roller to that of the log. Write: **PAT-APPL-6-238 401**, NTIS.

Automatic Hatchery Tray Dumper/312

Basculeur automatique de plateau de poulailler/312

Filed March 27, 1981, by the Department of Agriculture. This invention relates to automatic handling equipment for the chicken layer industry. The principal object of the instant invention is to automate the handling of hatchery waste in layer chicken hatcheries and to reduce the manual-labor requirements for those unpleasant and unhealthy operations associated with the handling of chicken waste. Write: **PAT-APPL-6-248 371**, NTIS.

Environmentally Independent Fiber Optics Rotation Sensor/312

Capteur de rotation à fibre optique, indépendant du milieu/312

Filed December 18, 1979, by the Department of the Air Force. An environmentally independent fiber optic rotation sensor having a polarizer or polarization filter interposed between each beam coupler and the beamsplitter of the rotation sensor. The polarizers permit the passing of the polarization of the beams therethrough while rejecting the cross-polarized waves of the beams thereby causing a co-polarized mode of operation to take place. As a result of the co-polarized mode of operation the rotation sensor is unaffected by the surrounding environmental conditions. However, in so doing, the rotation sensor is subject to spurious fringe patterns which take place at the fiber ends. Elimination of these fringe patterns take place at the input side of the rotation sensor rather than at the output side in order to produce satisfactory rotation sensing. Write: **PAT-APPL-6-105 043**, NTIS.

Focused, Single Strand, Optical Fiber Rotational Alignment Image-Sensing and Comparing System/312

Système de détection et de comparaison d'images à une seule fibre optique, pour vérifier l'alignement polaire/312

Filed May 30, 1980, by the Department of the Air Force. This system permits the detection of rotational mis-alignment (i.e., twist) of two initially aligned, but separated, members. The two aligned members are linked by a single strand of focused optical fiber which, in combination with other co-acting components of the system, allows the user to detect rotational mis-alignment (i.e., twist) of the members, based upon the phenomenon that a single strand of focused optical fiber is functionally capable of conveying a formed, completed, and real image from one end of the fiber to the other end. Accordingly, one end of the fiber is attached to one member where an image is formed, and that formed image is transmitted to the other end which is attached to the other member where the transmitted image is sensed and compared to what the image should be if the members are still rotationally aligned. If the image that is received at the other end is positionally different (i.e., twisted), then the members are rotationally mis-aligned. Write: **PAT-APPL-6-154 718**, NTIS.

Halogen Mass Flow Rate Detection System/312

Système de détection du débit massique des halogénures/312

Filed February 23, 1981, by the Department of the Air Force. This invention concerns a halogen mass flow rate detection system having an absorption cell through which a halogen entrained inert gas can be passed. An electromagnetic beam of preselected wavelength in the bound-continuum absorption region is passed through the cell while the halogen entrained inert gas is also therein as well as while only an inert gas passes through the cell. By measuring the intensity of the beam passing through the absorption cell, molecular absorption can be utilized for determining the concentration and, therefore, the mass flow rate of the halogen passing through the absorption cell. By incorporating the halogen mass flow rate detection system in an iodine/oxygen chemical laser, for example, the mass flow rate of the iodine into the resonant cavity of the laser can be simply, accurately and reliably ascertained. Write: **PAT-APPL-6-237 021**, NTIS.

Polyaromatic Esters/312

Esters polyaromatiques/312

Filed March 3, 1981, by the Department of the Air Force. New, easily processable, polyaromatic esters were prepared from 2,2'-diiododiphenyl-4,4'-dicarbonyl dichloride, isophthaloyl chloride and/or terephthaloyl chloride in combination with 4,4'-isopropylidene diphenol, 4,4'-sulfonyldiphenol, or resorcinol by interfacial condensation. In these polymers, phenylacetylenyl groups can be easily introduced into the polymer chain by replacing the iodine. This process leads to soluble and curable polymers from which films can be prepared. After curing the polymers are insoluble and show excellent thermal and chemical resistance. The curing process increases the polymers' softening temperature about 20 C. Write: **PAT-APPL-6-239 961**, NTIS.

Integral Electric Module and Assembly Jet Cooling System/312

Système intégral de refroidissement par jet de composants montés sur carte de circuit imprimé/312

Filed March 10, 1981, by the Department of the Air Force. An improved printed circuit board housing assembly is described wherein localized high intensity cooling of heat dissipating electronic components mounted on the circuit boards may be accomplished by direct impingement of streams of fluid coolant onto individual components; when coolant is passed through the housing, fluid streams, generated at openings provided in the circuit boards, impinge onto electronic components mounted on the next circuit board downstream from the source of coolant flow. Write: **PAT-APPL-6-242 502**, NTIS.

Upper and Lower Arm Load Simulator/312

Simulateur de charge sur les bras et les avant-bras/312

Filed March 18, 1981, by the Department of the Air Force. The invention is concerned with providing an upper and lower arm load simulator wherein the lower arm torque is produced by a pancake torque motor embedded within a flight suit modified with additional zippers to permit ease of installation. The torque motor transmits torque to the arms via an arrangement of plastic stays and struts sewn between cloth layers of the flight suit. Upper arm loading is produced by a torque motor driven tether line embedded within the flight suit slightly above the waistline. This unit serves to create shoulder torque, load the upper arm, and retard forward movement of the elbow. Accordingly, it is an object of the invention to provide an upper and lower arm load simulator wherein the lower arm load is applied by a pancake motor embedded in the flight suit near the elbow and the torque is transmitted to the arm by means of a series of plastic stays and struts sewn between cloth layers of the flight suit. Write: **PAT-APPL-6-244 842**, NTIS.

High Voltage Field Effect Transistor Pulse Apparatus/312

Appareil à impulsions à haute tension utilisant un transistor à effet de champ/312

Filed March 25, 1981, by the Department of the Air Force. A high voltage field effect transistor pulse apparatus utilizing majority carrier power field effect transistor in a series configuration to provide a high speed, high voltage output pulse. A fast non-saturating transformer trigger circuit provides a sharp rise time trigger pulse to initiate the high voltage output pulse, while a turn-off circuit provides the off-trigger pulse signal. Write: **PAT-APPL-6-247 495**, NTIS.

Pitot-Static Tube Tester System/312

Banc d'essai d'installation anémobarométrique d'aéronef/312

Filed March 30, 1981, by the Department of the Air Force. A system for testing, on the ground, an aircraft pitot-static pressure tube, its pilot and static pressure passageways and inlets, and the air pressure-sensitive flight instruments attached to the pitot-static pressure tube. The system includes a hollow adapter assembly into which the tip of the pitot-static pressure tube is inserted. When the tip is as far as it can go into the hollow adapter system, the pilot and static pressure inlets of the pitot-static tube are automatically in communication with their respective corresponding outlets in the hollow adapter assembly, irrespective of the orientation either of the pitot-static tube or of the hollow adapter assembly. This is accomplished with the use of a plurality of hollow spacers, internal of the hollow adapter body, which have flanged ends and form annular chambers that are intermediate of and in communication with the inlets and with the respective outlets. The hollow adapter assembly is releasably secured to the pitot-static tube by the use of rubber seals which, when compressed, expand, contact the tube, and hold it. Write: **PAT-APPL-6-249 255**, NTIS.

Charge-Coupled Device with Improved Signal Regeneration and Reduced Transfer Losses/312

Dispositif à transfert de charges à régénération de signal améliorées et pertes de transfert réduites/312

Filed April 7, 1981, by the Department of the Air Force. The signal regeneration stage of a charge-coupled device operating in a trailing bias charge mode is made to function without net delay of the signal. This is accomplished by means of a double pulse clock signal that first separates the signal from the trailing bias charge and then transfers the signal charge packet into an empty well of the following stage. Transfer efficiency in the device is achieved by means of an additional gate means to which either D.C. bias or the double pulse clock signal with D.C. offset is applied whereby modulation of the barrier potential under the gate means is reduced. Write: **PAT-APPL-6-251 697**, NTIS.

Transparency Halation Measurement, Method and Apparatus/312

Méthode et appareil de mesure des halos des transparents/312

Filed April 7, 1981, by the Department of the Air Force. For determining the extent of surface deterioration of a transparency, a method and apparatus is provided for measuring light scatter or halation produced by the deterioration. An intense light source is placed on one side of the transparency to be tested, and a camera and annular neutral density filter are positioned on the opposite side. The filter is aligned between the light source and camera lens so as to occlude or shade the lens from the direct light rays, whereas light scattered by portions of the transparency outside the periphery of the filter may be recorded on photographic film in the camera. The annular filter contains contrasting rings of varying shades of grey which facilitate standardization of halation measurements made on different transparencies or the same transparency at different periods in its life cycle. Write: **PAT-APPL-6-251 823**, NTIS.

Two-Axis Electromechanical Controller/312

Appareil électromécanique à deux axes/312

Filed April 7, 1981, by the Department of the Air Force. An improved two-axis electromechanical controller for controlling a dynamic process is described herein and comprises a hand grip coupled to two gimbal elements having mutually perpendicular axes of rotation, adjustable spring centering means mounted eccentric to the said axes of rotation and an adjustable counterweight for resisting displacement forces on the grip and restoring the grip to a reference position when a displacement force is removed, and electrical transducers for sensing the angular positions of each gimbal element. The force versus displacement relationship of the controller of the described invention is smooth and monotone, and may be adjusted to be substantially linear. Write: **PAT-APPL-6-251 832**, NTIS.

Phase-Shifting Amplifier/312

Amplificateur à déphasage/312

Filed April 13, 1981, by the Department of the Air Force. A phase shifting circuit comprising a quadrature hybrid for splitting a source of signals into two paths, with an amplifier in each path and a summing hybrid for recombining the outputs from the amplifiers to produce a resultant signal. Phase shift adjustment is achieved by independently varying the gain control voltage of each amplifier. Write: **PAT-APPL-6-253 453**, NTIS.

Microbial Filter Assembly/312

Support pour membrane de filtration d'agents microbiens/312

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed December 2, 1981, by the Department of the Army. A filter assembly for fluid containing microbial agents comprises a base defining a first broad filter supporting surface for receiving an appropriate microbial filter membrane, and at least one fluid drain disposed therebeneath to conduct the fluid carrying the microbial samples away from the filter membrane. One or more cover plates may be detachably mounted over the filter supporting surface of the base to sandwich the filter membrane. The cover plates define a corresponding number of tapering inlet ports in axial alignment with the fluid drains disposed in the base to assist in the rapid passage of the microbe-containing fluid to the filter membrane. The inlet ports terminate in reduced-diameter orifices, and ring-like projections annularly disposed about the orifices compress the filter membrane between the cover plate and the base, and form a fluid-tight sandwiching seal that prevent the microbe-containing fluid from escaping past the exposed filter area. A plurality of fluid inlets and corresponding filter drains permits the disposition of several microbial samples on one filter membrane. Write: **PAT-APPL-6-233 758**, NTIS.

Reversible Kingpin for Trailers/312

Pivot central réversible pour remorques/312

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed March 6, 1981, by the Department of the Army. A novel adjustable skid plate assembly which permits any trailer so equipped to be towed by any sufficiently-powered draft vehicle having a different lower fifth wheel height than the trailer. By rotation of the entire skid plate assembly different skid plates are presented for use with the draft vehicle. A latch means or counter weight means is provided to eliminate unwanted rotation of the assembly. Write: **PAT-APPL-6-241 292**, NTIS.

Logistics Vehicle Armor/312

Blindage de camion logistique/312

Filed March 13, 1981, by the Department of the Army. This abstract discloses a protective covering for the cargo box of a military logistic vehicle. The basic fabric covering has special add-on pockets or sleeves for receiving alternative type of armor inserts (slats) for achieving various levels of ballistic hardening. Advantages of the system are easy armor adjustability or replaceability, and ability to remove the armor when it is not needed. Write: **PAT-APPL-6-243 287**, NTIS.

Sustainer Circuit for Plasma Display Panels/312

Circuit de maintien pour panneaux d'affichage à plasma/312

Filed March 13, 1981, by the Department of the Army. This invention relates to plasma display panels and more particularly to an improved circuitry for providing a sustaining voltage for A.C. plasma display panels from a single power supply. Write: **PAT-APPL-6-243 292**, NTIS.

Driving-Guidance System for a Resilient Vehicle Propulsion Band/312

Système de guidage de chenille élastique d'entraînement de véhicule/312

Filed March 16, 1981, by the Department of the Army. In a ground vehicle having resilient endless bands engaged with the terrain for suspension and propulsion purposes, improved novel roller arrangements for maintaining a desired band

envelope under adverse operating conditions, such as large vehicle accelerations or decelerations, movement over rough bumpy terrain, or vehicle turning actions. Write: **PAT-APPL-6-244 548**, NTIS.

Resilient Band Structure/312

Chenille élastique/312

Filed March 19, 1981, by the Department of the Army. An annular resilient band structure designed for installation on a ground vehicle to provide tractive propulsion force and vehicle suspension force. Resilient suspension function is achieved by an annular resilient leaf spring core encapsulated within an elastomeric sheath. Load transfer between the ground or vehicle and the band structure is obtained by means of plies or cords trained along the surfaces of the core between non-extensible beads at opposite side edges of the band structure. Propulsion capability is achieved by metallic drive shoes rivetted onto edge areas of the elastomeric sheath. Write: **PAT-APPL-6-245 481**, NTIS.

Acousto-Optic Time Integrating Frequency Scanning Correlator/312

Corrélateur acousto-optique à balayage de fréquences et intégration temporelle/312

Filed April 6, 1981, by the Department of the Army. This abstract discloses an acousto-optic time integrating two-dimensional frequency scanning correlator for cross-correlating signals which are separated in frequency. Two coherent light beams which are derived from the same laser are fed across respective Bragg cells, one cell having the signal A(t) cos omega sub A t propagating thereacross and the other cell having the signal B(t) cos omega sub B t propagating thereacross. The respective output beams are comprised in the x direction and expanded in the y direction and are made incident on an acousto-optical correlator device having chirp signals counter-propagating thereacross. The optical output is fed to a time-integrating photodiode array which provides an output signal corresponding to the cross-correlation of A(t) and B(t). In a further embodiment, the two Bragg cells are replaced by a single Bragg cell and beans having different polarizations are fed thereacross. In a still further embodiment, only a single crystal is used which has the A(t) and B(t) signals, as well as the chirp signals, counter-propagating thereacross. Write: **PAT-APPL-6-251 605**, NTIS.

Source-Region Electromagnetic Pulse Simulator/312

Simulateur d'impulsions électromagnétiques provenant d'explosions nucléaires/312

Filed April 10, 1981, by the Department of the Army. These and other objects, features and advantages of the invention are accomplished by a method and apparatus for simulating, in conjunction with a source of ionizing radiation, intense pulsed electromagnetic fields and time varying conductivity caused by the gamma radiation associated with a nuclear detonation. An enclosed space, including the source of ionizing radiation is separated into three spaces, each space separated from the adjacent space by a gas impermeable, radiation permeable barrier. A guided wave structure, pulsed with high voltage pulses in conjunction with the firing of the source of ionizing radiation is disposed adjacent to the barrier separating two of the spaces. A gas-handling system is provided to introduce a selected non-ionizing gas and a selected ionizing gas into the spaces on either side of the barrier adjacent to the guided wave structure. Also provided are field-shaping busbars for shaping the electromagnetic fields in one of the spaces. Write: **PAT-APPL-6-252 737**, NTIS.

GPS/Doppler Sensor Velocity Derived Attitude Reference System/312

Système de référence d'attitude à dérivation de données de vitesse provenant de satellites de navigation et de capteurs à effet Doppler/312

Filed April 17, 1981, by the Department of the Army. An accurate and constantly updated attitude instrument is provided for aircraft. The pitch and roll angles are calculated from two sets of velocity measurements, one set being derived from signals received from orbiting navigational satellites and the other set from on-board equipment which determines the aircraft's axial velocities. The on-board equipment may be a Doppler groundspeed sensor or an inertial system using accelerometers, the outputs of which are integrated to derive the axial velocities. Write: **PAT-APPL-6-255 030**, NTIS.

Superlattice Millimeter Wave Detector/312

Détecteur d'ondes millimétriques à superstructure cristalline/312

Filed April 22, 1981, by the Department of the Army. This document discloses a millimeter wave detector wherein the radiation is detected by a superlattice. The superlattice consists of alternate layers of materials with thickness that provide sub-band widths in the superlattice corresponding to the energy of millimeter wave radiation. A bias voltage is applied across the superlattice and the current through the superlattice is measured. Write: **PAT-APPL-6-256 356**, NTIS.

Self-Survey Means/312

Moyens d'autolocalisation/312

Filed April 29, 1981, by the Department of the Army. This document discloses a method and apparatus for a passive station to locate itself relative to a stationary or moving transmitting station transmitting a narrow pulsed scanning beam by utilizing reception of pulses directly from the transmitting station and reception of reflected pulses from a set of scatterers. A method and means for determining a bearing from the transmitting station and a method and means for determining a range to the transmitting station is disclosed utilizing a set of differential times, the times for a pulse from the transmitting station to travel to each scatterer and then to the passive station, a set of angles lying between a line connecting the transmitting station and passive station and a set of lines connecting the transmitting station and the set of scatterers and a set of angles lying between a link connecting the passive station and the transmitting station and the set of lines connecting the passive station and the set of scatterers. Write: **PAT-APPL-6-258 828**, NTIS.

Optical Waveguide Dosimeter/312

Dosimètre à guide d'ondes optique/312

Filed May 28, 1981, by the Department of the Army. The general object of this invention is to provide a low-cost, portable dosimeter for personnel dosimetry that does not require maintenance and that can be used in civil defense emergencies. A further object of the invention is to provide such a dosimeter that does not require any power source or auxiliary equipment such as a readout device or charger. A still further object of the invention is to provide such a dosimeter that can be stored for long periods and be available instantly for use in case of an emergency. Another object of the invention is to increase the sensitivity of leuko dye dosimetry by several orders of magnitude to make it applicable for emergency personnel dosimetry where doses of 0 to 1000 rads (tissue) are of interest. It has now been found that the foregoing objects can be attained by incorporating a liquid solution of a leuko dye as the core of an optical wave guide. The optical wave guide dosimeter includes the liquid solution of leuko dye hermetically sealed in flexible and transparent plastic tubing. Write: **PAT-APPL-6-267 312**, NTIS.

Acoustic Diffractometer/312

Diffractomètre acoustique/312

Filed June 1, 1981, by the Department of the Army. The use of fabricated periodic piezoelectric structures fabricated from high resistivity semiconducting crystals in detecting millimeter waves in the GHz range is disclosed. Broadly speaking, this invention relates to periodic piezoelectric structures. More particularly, in a preferred embodiment, this invention relates to periodic, piezoelectric structures which are fabricated from high resistivity, semiconducting crystals, such as those in cubic glass 43m. The frequency range of 100 to 300 GHz is of great interest to both military and civil authorities. Among the possible uses for this frequency band are fixed and mobile radar systems, terrestrial and satellite communications systems, etc. Unfortunately, heretofore, no satisfactory detector or monochrometer has been available for use of these high frequencies, which factor has greatly retarded the development of millimeter wave systems of this type. Write: **PAT-APPL-6-269 283**, NTIS.

Doppler Frequency Analysis of Radar/312

Analyse de données de fréquence Doppler de radar/312

Filed June 8, 1981, by the Department of the Army. A Doppler radar is adapted to respond only to walking human targets by providing means to detect the frequency modulation of the Doppler signals caused by the oscillatory body movements of such walking targets. A frequency locked loop frequency modulation detector is provided for efficient detection of this so-called step frequency modulation, and the detected step frequencies are split into several bands representing targets walking at different step rates. Circuitry is shown for adapting this technique to continuous wave radars or range gated radars. This so called step frequency is detected by mean of a specially selected frequency modulation detector and circuitry is provided for splitting the step frequency signals into several bands corresponding to targets stepping at different speeds, for example, the lowest stepping frequency may correspond to a slow walking man and the highest to a running man. The invention can be utilized with radars with or without range-measuring capability. Write: **PAT-APPL-6-271 725**, NTIS.

Irradiation of Microorganism Such as Bacteria and Viruses in the Presence of Chemical Enhancing Agent/312

Irradiation de micro-organismes, tels que bactéries et virus, en présence d'un activateur chimique/312

Filed April 18, 1980, by the Department of Energy. This invention relates to a method for disinfecting waste material, such as sewage, containing harmful microorganisms by means of high energy ionizing radiation. This method includes the addition of a chemical enhancing agent such as aluminum chloride or ferric chloride which would increase the sensitivity of the microorganisms to irradiation. Consequently lower radiation doses would be needed for disinfection. Write: **PAT-APPL-6-141 508**, DOE.

Debris-Less Method and Apparatus for Forming Apertures in Hollow Metallic Articles/312

Appareil et méthode permettant l'exécution d'orifices dans les articles métalliques creux sans laisser de copeaux/312

Filed June 24, 1980, by the Department of Energy. This invention is a method for forming an aperture in a wall of a hollow metallic article without introducing metallic debris therein. In a typical operation, an annular groove is formed in an exterior portion of the wall. The groove defines an annular wall segment, and the bottom of the groove is shaped to slope downwardly away from the segment to form a tapered annular web which connects the segment to the wall. Any suitable coupling is attached to the outer face of the segment, as by welding. Pull then is applied to the coupling to effect circumferential breakage of the web, thus forming a removable single-piece wall fragment consisting of the web and segment. The fragment and the coupling member attached thereto then are removed from the wall. Write: **PAT-APPL-6-162 549**, DOE.

Method and Apparatus for Controlling Fluid Flow/312

Appareil et méthode de contrôle de débit/312

Filed June 27, 1980, by the Department of Energy. A method and apparatus for precisely controlling the rate (and hence amount) of fluid flow are given. The controlled flow rate is finely adjustable, can be extremely small (on the order of microliter-atmospheres per second), can be adjusted to zero (flow stopped), and is stable to better than 1% with time. The dead volume of the valve can be made arbitrarily small, in fact essentially zero. The valve employs no wearing mechanical parts (including springs, stems, or seals). The valve is finely adjustable, has a flow rate dynamic range of many decades, can be made compatible with any fluid, and is suitable for incorporation into an open or closed loop servo-control system. Write: **PAT-APPL-6-163 896**, DOE.

Self-Aligning Lathe Chuck Jaws/312

Mors de mandrin autocentreurs/312

Filed August 26, 1980, by the Department of Energy. A lathe chuck jaw for a lathe chuck having a radially moving actuator which radially moves the jaw into and out from the workpiece is described. A jaw base part is rigidly connected to the actuator. A jaw shoe part is rotatably attached to the base part. The shoe part has a workpiece-conforming surface which can hold the workpiece. The rotatable attachment of the shoe part allows it to match the general orientation of the workpiece, including a nonlongitudinal orientation due to a workpiece's imperfect shape. Write: **PAT-APPL-6-181 519**, DOE.

Cross-Slice Data Acquisition System for PET Scanner/312

Système d'acquisition de données de coupes transversales pour scintigraphe de tomographie par émission de positrons/312

Filed April 3, 1981, by the Department of Health and Human Services. The present invention relates to computed tomography systems and more particularly to diagnostic positron emission tomography (PET) scanners. Diagnostic utilization of positron emission tomography involves administering a radionuclide to a patient, causing millions of positrons to be emitted within the patient. These positrons travel for very short distances, on the order of a few millimeters, and in their travel interact with electrons of similar mass. When positrons and electrons interact, an annihilation event occurs whereby the mass of the positron and electron are annihilated or disintegrated and photons are emitted at substantially 180 degrees with respect to one another. Positrons are positively charged electrons, usually emitted by radionuclides which are unstable because they include an excess of neutrons with respect to a stable state. Write: **PAT-APPL-6-250 840**, NTIS.

Method for Removing Sulfur Dioxide from a Gas Stream/312

Méthode d'extraction de dioxyde de soufre d'un écoulement gazeux/312

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed July 9, 1981, by the Department of Health and Human Services. The combustion of sulfur-containing fuels generates significant amounts of sulfur dioxide (SO2). Oxides of nitrogen (NOx) are also often generated in the course of the combustion of various fuels. Without appropriate treatment of the exhaust gases of combustion, large amounts of sulfur and nitrogen oxides would be injected into the atmosphere, causing a variety of ecological problems. A method is provided for removing SO2 from gas streams by its gas-phase reaction with a stabilized Criegee intermediate under conditions where a very large excess of water vapor is avoided, resulting in efficient scavenging of SO2 by the Criegee intermediate to form an adduct. The adduct reacts with water vapor to convert it directly to sulfuric acid, which is then separated from the gas stream. The Criegee intermediate may be generated in a variety of ways. Write: **PAT-APPL-6-281 745**, NTIS.

Method for Controlled Burnout of Abandoned Coal Mines and Waste Banks/312

Méthode de brûlage contrôlé des mines de charbon et des crassiers abandonnés/312

Price per copy from NTIS: PC U.S. $6.50/MF U.S. $3.50, filed November 21, 1980, by the Department of the Interior. A method is provided for recovering energy from wasted coal. Write: **PAT-APPL-6-209 173**, NTIS.

Variable Speed Drive/312

Entraînement à vitesse variable/312

Filed February 27, 1981, by NASA. A variable speed drive is described wherein a first embodiment is comprised of a pivotally mounted prime mover coupled to a rotary fluid output device, such as a fan or pump, through a variable and fixed pulley drive arrangement. The pivotal position of the prime mover and accordingly the pitch diameter of variable pulley means is controlled in accordance with fluid motor means coupled to the prime mover. This is actuated in response to a fluid feedback control signal derived from a sensed output of the rotary fluid output device. The pivotal motion of the prime mover imparts an accurate motion to the variable pulley means which effects a speed variation of the rotary fluid output device in accordance with the variation of the pitch diameter ratio of opposing variable and fixed pulley means. In a second embodiment, idler pulley means are pivotally mounted between the prime mover and the rotary fluid output device. Write: **PAT-APPL-6-238 786**, 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.

Compression Test Fixture/312

Appareil d'essai de résistance à la compression/312

Filed February 13, 1981, by NASA. An apparatus for compressive testing of a test specimen may comprise vertically spaced upper and lower platen members between which a test specimen may be placed. The platen members are supported by a fixed support assembly. A load indicator is interposed between the upper platen member and the support assembly for supporting the total weight of the upper platen member and any additional weight which may be placed on it. Operating means are provided for moving the lower platen member upwardly toward the upper platen member whereby an increasing portion of the total weight is transferred from the load indicator to the test specimen. The testing apparatus may include devices for limiting the movement of the lower platen member toward the upper platen member to prevent permanent deformation in the test specimen. In one embodiment, the limit devices include a number of rods attached to one of the platen members and a vertically adjustable extension member engageable with the other platen member. Write: **PAT-APPL-6-234 223**, NASA, Lyndon B. Johnson Space Center, Mail Code: AM, Houston, Texas 77058 and send a copy of your initial correspondence to Canadian Consulate, 2001 Bryan Tower, Suite 1600, Dallas, Texas 75201-3051, U.S.A.

A Gas-to-Hydraulic Power Converter/312

Convertisseur de puissance gaz-hydraulique/312

Filed February 27, 1981, by NASA. A gas piston driven hydraulic piston pump with a high efficiency gas cycle which injects the gas in slugs at the beginning of each power stroke is discussed. The hydraulic piston is disposed to operate inside the gas piston, and the two pistons which are both slidably but nonrotably mounted, are coupled together with a rotating but nonsliding motion transfer ring extending into antifriction grooves in the sidewalls of the two pistons. To make the hydraulic piston move at a constant speed during constant hydraulic horsepower demand, grooves are machined with variable and opposite pitches. The motion transfer ring is denominated a force multiplier ring. It is concluded that any number of piston assembly sets may be used to obtain desired hydraulic horsepower. Write: **PAT-APPL-6-238 785**, NASA, Lyndon B. Johnson Space Center, Mail Code: AM, Houston, Texas 77058 and send a copy of your initial correspondence to Canadian Consulate, 2001 Bryan Tower, Suite 1600, Dallas, Texas 75201-3051, U.S.A.

Apparatus for Accurately Preloading Auger Attachment Means for Frangible Protective Material/312

Appareil permettant de mettre préalablement sous charge précise le dispositif de fixation de mèches servant à la pose de matériel de protection fragile/312

Filed March 30, 1981, by NASA. Improvements to accurately adjust and secure the preload on the spring means, which were used on the Space Shuttle Orbiter, are discussed. Two forms of the tool are described; a multipart tool and a mounting jig. A known preload is applied to the spring means utilized for resiliently attaching frangible protective tile to the surface of structures which are exposed to extremely high temperatures. The tool is adaptable for applying preloads to devices installed in blind holes. Write: **PAT-APPL-6-248 746**, NASA, Lyndon B. Johnson Space Center, Mail Code: AM, Houston, Texas 77058 and send a copy of your initial correspondence to Canadian Consulate, 2001 Bryan Tower, Suite 1600, Dallas, Texas 75201-3051, U.S.A.

Mobile Sampler for Use in Acquiring Samples of Terrestrial Atmospheric Gasses/312

Échantillonneur mobile pour prélever des échantillons de gaz de l'atmosphère terrestre/312

Filed March 23, 1981, by NASA. Samples of terrestial atmospheric gasses may be acquired from a free body of such gasses using a device which is characterized by a number of tubular bodies adapted to be mounted in side-by-side relation on a motorized highway vehicle in mutual parallelism with the axis of the normal path of travel for the vehicles. Each of the bodies is of a cylindrical configuration and has an axial opening at each of its opposite ends through which a linear flow path is defined. A pair of pivotally supported, spring-biased sealing caps is mounted adjacent to the ends of the body and continuously urged into a hermetic sealing relationship. A restraint for securing the caps against spring-urged pivotal displacement, includes a separable, normally tensioned line interconnecting the caps and an operable release mechanism for simultaneously releasing the caps for spring-urged displacement. A hot wire cutter is included for separating the line, whereby samples of air are trapped in the body as the caps are spring-driven to assume a hermetically sealed relation with the openings defined in each of the opposite ends of the body. Write: **PAT-APPL-6-246 777**, Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014-1377, U.S.A.

Maser Amplifier Slow Wave Structure/312

Structure d'onde lente pour amplificateur maser/312

Filed March 23, 1981, by NASA. A maser amplifier is described which includes a slow wave structure having multiple comb elements lying against a strip of maser material, which is constructed to avoid problems arising from differential expansion of the materials of the maser strip and comb during temperature cycling, and that enables formation and mounting of the comb elements by the relatively precise and low cost printed circuit techniques. Each comb has a height of about one half wavelength of the microwaves to be amplified, and the comb elements are devoid of direct electrical connections to one another or to the waveguide walls. The comb elements can be formed by vapor deposition, plating, or etching of an adhesively mounted foil, on a dielectric backing strip. Write: **PAT-APPL-6-246 779**, Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014-1377, U.S.A.

A Wedge Assembly/312

Ensemble de montage à coincement pour circuits imprimés/312

Filed May 14, 1980, by the Department of the Navy. A wedge assembly for securing a circuit board in an electronic package gives positive surface contact and excellent heat transfer between the multi-layer board and the electronic package as well as positive lock under vibration and shock. A housing, which may be mounted on a multi-layer board, contains a wedge member having two ramped ends within an open cavity having a single ramped end. Means such as a ramped anvil which slides within the cavity under force from a screw is provided within the cavity for adjusting the wedge member relative to the housing to provide positive contact between the electronic package and the multi-layer board. Write: **PAT-APPL-6-151 072**, NAVY.

An Improved Method for Etch Thinning Silicon Devices/312

Méthode améliorée d'amincissement de dispositifs au silicium par attaque chimique/312

Filed September 23, 1980, by the Department of the Navy. This application discloses an improved method for etch-thinning silicon devices using three sequential etches. The device is pre-thinned in a hot KOH-H2O etch. The thinning etch is a hydrofluoric, nitric, acetic acids (1:3:10) and a precise amount of hydrogen peroxide mixture. The clean-up etch is a potassium permanganate, hydrofluoric and acetic acids mixture. The result is a repeatedly specular, smooth, uniform, 10-micron thick membrane over the pixels with a p + surface to enhance the CCI optical response. Write: **PAT-APPL-6-191 658**, NAVY.

Fabrication Method for Unoriented Phase 1 PVF2/312

Méthode de fabrication de PVF2 de phase 1 non orienté/312

Filed October 24, 1981, by the Department of the Navy. Fabrication of unoriented phase I crystalline PVF2 is described wherein commercially available PVF2 phase II (crystalline form) is placed in a high pressure cell and its temperature is raised slightly over its melting point. The sample is then subjected to abrupt changes in high pressure and the temperature is dropped thereafter. The pressure is then reduced resulting in a product which contains both phase I and phase II forms of PVF2. The phase I content of the product varies from a few percent and up depending upon the pressure applied during the quenching step. Write: **PAT-APPL-6-200 172**, NAVY.

PZT/Polymer Composites and Their Fabrication/312

Composition et préparation de composites PZT/polymère/312

Filed November 13, 1981, by the Department of the Navy. Subject invention describes PZT/polymer composites and a simple method of their fabrication. A commercially available PZT powder is mixed with a polymer such as polymethyl methacrylate (PMM) spheres. Pellets of diameter 25 mm are pressed from the mixture and heated slowly over a long period of time in a silicon carbide resistance furnace. The samples are then allowed to cool and are easily vacuum impregnated with one of the polymers, i.e. a high purity silicone rubber elastomer or a stiff vinylcyclohexene dioxide epoxy. An object of subject invention is to have a simplified method of fabricating high quality PZT/polymer composites. Another object of subject invention is to fabricate 3:3 connectivity PZT/polymer composites by utilizing a simpler fabrication method than the coral replamine process. Still another object of subject invention is to fabricate high quality PZT/polymer composites which is industrially feasible for manufacture. Still another object of subject invention is to fabricate PZT/polymer composites with reproducible results. Write: **PAT-APPL-6-206 732**, NAVY.

Rotary Latch/312

Verrou rotatif/312

Filed December 15, 1980, by the Department of the Navy. This invention describes a rotary latch having drive mean rotatably mounted in a housing, said drive means having a semi-circular hooked-shaped latch arm thereon. A cover is attached to said housing and an axially mounted, spring-biased shaft is concentrically mounted within said drive means and has locking lugs engageable with said drive means and said cover. In one axial position of said center shaft, said drive mean is locked against rotation and, in another axial position the drive means is unlocked and free to rotate. A stop is provided on said drive means and is engageable with said housing to limit rotation of latch arm. Write: **PAT-APPL-6-216 722**, NAVY.

Protective Coating/312

Revêtement protecteur/312

Filed December 29, 1980, by the Department of the Navy. Method and protective coating composition for preventing or minimizing combustion or melting of titanium and combustible alloys thereof. Two layers of coatings are applied, the first layer preventing diffusion of the second layer into the titanium or alloy even at elevated temperature, and the second layer suppressing titanium combustion. The first layer contains chromium, molybdenum, niobium, tantalum, vanadium, zirconium, platinum, or rhodium or a combination thereof or alloy of any of these metals. The second layer contains copper, aluminum, gold, nickel, silver, cobalt or a combination thereof or alloy of any of these metals. By preventing diffusion of the second layer into the substrate, the first layer prevents degradation of substrate engineering or mechanical properties. When in an operating aircraft engine molten or burning titanium or other material arrives at the surface of the second layer, the second layer melts directly underneath the molten material which then is moved downstream by the engine airflow, leaving behind a non-melted substrate. Write: **PAT-APPL-6-220 394**, NAVY.

Electronic Function Selector for Sonobuoys/312

Sélecteur électronique de fonctions pour bouée acoustique/312

Filed January 19, 1981, by the Department of the Navy. The present invention relates to sonobuoys and more particularly to means for selecting and setting different operating parameters such as transmitter channel frequency, operating lifetime and depth of hydrophone deployment. A microcomputer and memory are provided within a sonobuoy and a single setting switch is provided to select data to be set in memory which retains the desired operating parameters. A second switch and display elements are provided which, after programming, can be used to provide a visual indication of the parameters which are in memory. After deployment of a sonobuoy and activation of a sea-water battery, the memory contents are transferred to operating circuitry to cause the sonobuoy to perform the programmed functions. It is therefore a general object of the present invention to provide an electronic function selector for programming a sonobuoy. Write: **PAT-APPL-6-226 272**, NAVY.

Electrohydrodynamic Inductively Pumped Heat Pipe/312

Caloduc à pompage électrohydrodynamique induit/312

Filed January 19, 1981, by the Department of the Navy. The self-priming voltage controllable electrohydrodynamic inductively pumped heat pipe of the present invention greatly improves the maximum thermal throughout of heat pipes in low and medium temperature applications calling for the use of dielectric working fluids. An applied traveling potential wave induces a traveling wave of electrical charge in selected phase relation in the liquid phase of the dielectric working fluid providing an electrical traction which pumps the working fluid from the condensor to the evaporator. Write: **PAT-APPL-6-226 319**, NAVY.

Computer Generated Hologram Mask/312 **Masques d'hologramme créés par ordinateur/312**

Filed January 21, 1981, by the Department of the Navy. A method of making hologram masks for arbitrary shapes is disclosed. The masks are generated by calculating point by point the surface contour of the hologram desired for the incoming wavefront and the desired wavefront. Calculation permits a mass image to be generated which can be photoreduced to a desired size. The mask permits holograms to correct aberrated wavefronts for any arbitrary distorting objects desired. The use of thin holograms permits the hologram to avoid wavelength and angle of incidence limitations. Write: **PAT-APPL-6-226 980**, NAVY.

Low Frequency, Log-Periodic Acoustic Array/312 **Réseau acoustique log-périodique à basse fréquence/312**

Filed January 26, 1981, by the Department of the Navy. This application discloses a method for determining optimum element spacing for a low frequency, log-periodic acoustic line array comprising a plurality of omnidirectional hydrophones arranged in a line wherein the spacing between hydrophones is based on logarithmic relationship using multiple dipole pairs, each pair centered about the acoustic axis of the array, such that the distance between each dipole pair bears a constant ratio to the wavelength of the acoustic frequency band to be investigated by that hydrophone pair. Each dipole pair relates to a particular frequency band and the assembled array covers at least a decade range of frequencies through juxtaposition of contiguous frequency bands. The overall arrangement assures retention of selected beam pattern directionality over the entire decade range of frequencies. Write: **PAT-APPL-6-228 055**, NAVY.

A Short Wavelength Free Electron Laser Using Low Energy Electrons/312 **Laser à électrons libres de courte longueur d'onde utilisant un faisceau électronique de faible énergie/312**

Filed January 21, 1981, by the Department of the Navy. This application discloses a method and apparatus for constructing a continuous wave (CW) free electron laser (FEL) system capable of providing tunable high power laser radiation at short wavelengths using low-energy recirculating DC electron beams. This method replaces the static periodic magnetic field used in conventional FEL systems with an equivalently intense and continuous electromagnetic pump field having spatial periodicity less than 1 cm. The pump field is generated by a low-energy recirculated DC electron beam interacting with a transverse static periodic magnetic field. Write: **PAT-APPL-6-228 649**, NAVY.

FEL Gain Enhancement Effect by a Static Transverse Magnetic Field with a Longitudinal Gradient/312 **Accroissement du gain des lasers à électrons libres par un champ magnétique transversal constant, présentant un gradient longitudinal/312**

Filed January 22, 1981, by the Department of the Navy. An apparatus and method are described for greatly enhancing the power output of a free electron laser. To enhance the electron kinetic energy that is converted to laser radiation, the wave amplification resonance condition is continuously changed along the length of the laser interaction region. The changing resonance condition is achieved by use of a static magnetic field transverse to the injected electron beam, the magnetic field having longitudinal magnetic field gradient. Write: **PAT-APPL-6-228 845**, NAVY.

Multidirectional Translator Mechanism/312 **Mécanisme translateur multidirectif/312**

Filed March 2, 1981, by the Department of the Navy. The invention is a planar x-y translator for precision alignment of one part relative to another comprising a mounting plate holder, an adjustable cradle and a housing wherein the cradle is spring biased within the housing by multiple spring means at the top of the cradle and tension means at the base of the cradle. Write: **PAT-APPL-6-239 717**, NAVY.

Piezoelectric Sandwich Polymer Transducer/312 **Transducteur à polymère piézoélectrique/312**

Filed March 9, 1981, by the Department of the Navy. A piezoelectric polymer array, used as a transducer sensor, comprises a sheet of ferroelectric polymer sandwiched between two protective layers of plastic, for example mylar. The sheet of polymer has poles formed in it to conform to the configuration of the transducer array with which it is used, each pole being situated opposite a transducer of the array. Although it is a ferroelectric material, it exhibits piezoelectric behavior. The sheet has electrodes deposited on either side of it. The sheets of plastic are metallized on their outside surfaces to provide electrical isolation. Electrical leads may comprise either discrete wires bonded to the electrodes, or a pattern of conductors deposited on either the polymer or on the inside surfaces of the protective sheets. Write: **PAT-APPL-6-241 873**, NAVY.

Method for Controlling Impurities in Liquid Phase Epitaxial Growth/312

Méthode de dosage des impuretés dans la croissance épitaxiale à phase liquide/312

Filed March 6, 1981, by the Department of the Navy. In a process for growth of a layer of semiconductor material by precipitation from a solution of the semiconductor material in a solvent by liquid phase epitaxial growth (LPE), the improvement is the step of adding from approximately 0.01% to 1.0% by weight of a material which forms a stable oxide or sulfide and is soluble in the solvent to the solution prior to the step of precipitating the semiconductor layer to eliminate the deleterious effects of residual oxygen. A relatively short annealing time is required to dissolve the addition in the solvent and allow the addition to react with dissolved oxygen or other impurities before a conventional LPE growth process may be initiated, although high temperature anneals of varying length may precede or follow the addition of the oxide-forming or sulfide-forming material. Zirconium, titanium, vanadium, scandium, yttrium, and aluminum are in general suitable for use as the oxide-forming material. Write: **PAT-APPL-6-241 997**, NAVY.

Floating-Point A/D and D/A Converter/312

Convertisseur A/N et N/A à virgule décimate flottante/312

Filed March 16, 1981, by the Department of the Navy. This abstract discloses an improvement for digitizing analog signals over wide dynamic range for a floating point decimal conversion. The widely fluctuating input analog voltages are converted to currents to prevent saturation of circuit elements and are, first, compared with a derived reference signal to produce positive voltages or negative voltages if the input signal exceeds or is less than the derived reference current. The positive and negative voltages are fed to a combined floating point processing unit and microprocessor which generates two groups of digital signals. The first group is representative of m mantissa increments and the second group of n signals is indicative of the order of magnitude of the mantissa components. A mantissa digital-to-analog current generator and an order of magnitude digital-to-analog current generator are coupled in series with respect to each other to provide the derived reference current which is to be compared with the next sample of the input analog signal. Since the derived reference current is derived in the immediately preceding sample period, the newly sampled analog signal is compared as being greater or lesser with a still newer input sample. Write: **PAT-APPL-6-243 985**, NAVY.

Primer Firing Means/312

Dispositif de mise à feu d'amorces/312

Filed March 23, 1981, by the Department of the Navy. A firing mechanism for detonating a plurality of percussion primers is presented. An explodable means and at least one percussion primer are disposed at opposite ends of a housing defining a cavity for transmitting explosive energy from the detonated explodable means to each of the percussion primers for firing the percussion primers. An orifice plate, secured within the cavity between the explodable, means and the percussion primers is provided with plurality of apertures for providing passageways for transmitting the explosive energy from the explodable means to the percussion primers. The apertures are calibrated for metering the quantity of the explosive energy transmitted to the percussion primers and for providing substantially simultaneous initiation of the plurality of percussion primers. The apertures are off-set for substantially avoiding the striking of the percussion primers by fragments from the explodable means. Write: **PAT-APPL-6-246 480**, NAVY.

Aircraft Self-Protection Radar/312

Radar d'autoprotection d'aéronef/312

Filed April 27, 1981, by the Department of the Navy. This invention relates to an aircraft self-protection warning system and particularly to such a system utilizing radar. Yet more particularly, the invention relates to a warning system having the ability to simultaneously maintain surveillance both fore and aft with a single radar. Conventional radar systems for aircraft warning protection have either depended upon a forward-looking radar only or have had separate radar units for rear or side coverage. The forward-looking systems have been housed in the forward nosecone with little or no external portions to cause aerodynamic drag. Side and rear installations, however, almost invariably have required structures outside of the normal aerodynamic surfaces of the aircraft. Because such installations require modifications of the airframe, the provision of such additional protection has been resisted. It is an object of this invention to provide a radar unit having a pattern of waves radiating in one direction and a portion of such pattern intercepted by means reflecting a portion of said waves in the opposite direction. It is further object of the present invention to provide fore and aft protection in a single radar unit confined within the conventional nosecone radome of an aircraft. Write: **PAT-APPL-6-251 617**, NAVY.

Selective Photoinduced Condensation Technique for Producing Semiconducting Compounds/312

Technique de condensation photo-induite sélective pour la production de composés semiconducteurs/312

Filed April 24, 1981, by the Department of the Navy. A process is given for producing a variety of organic-inorganic luminescent and semiconductive compounds or materials in the form of a film deposited directly on the surface of a substrate by ultraviolet photoinduced condensation from gaseous reactants such as antimony pentafluoride (SbF5)n and organic

or inorganic halogen-containing compounds. The process provides a new class of antimony (Sb) doped luminescent and semiconductive materials which can be produced on any arbitrary size or shape substrate, or even on existing substrates of other semiconductive materials or chips, to form semiconductive devices. The process may be used in photo-inducing luminescent panel displays or microelectronic circuits, such as integrated electrical or optical circuits. Write: **PAT-APPL-6-257 028**, NAVY.

Surface Channel Charge Transfer Device on Indium Phosphide/312

Dispositif de transfert de charge à canal superficiel sur substrat de phosphure d'indium/312

Filed April 29, 1981, by the Department of the Navy. A charge transfer device is provided having a p-type semi-conducting indium phosphide substrate on which a pair of channel contacts are disposed. An insulating layer spans the substrate surface between the contacts. Gate electrodes are disposed on the insulating layer between the channel contacts. Write: **PAT-APPL-6-258 862**, NAVY.

Digital Interface System/312

Système d'interface numérique/312

Price per copy from NTIS: PC U.S. $8.00/MF U.S. $3.50, filed April 30, 1981, by the Department of the Navy. A system interfaces classified information for encryption and transmission over ultra high frequency (uhf) or high frequency (hf) bands and for receiving and decryption of uhf and hf information for relay to a tactical data unit or a vocoder unit. The uhf link is relayed by satellite while the hf link follows a more conventional path to provide for backup in case one link or the other somehow is disabled. Optionally, a uhf submarine-satellite information exchange capability system (SSIXS) is included when the rest of the system is not utilized. Write: **PAT-APPL-6-258 987**, NAVY.

Least Squares Lattice Decision Feedback Equalizer/312

Égalisateur à réseaux en treillis faisant appel à la méthode des moindres carrés/312

Filed April 30, 1981, by the Department of the Navy. An-improved equalizer receives the output of a data transmission channel at the first stage of a number of successively coupled lattice stages which are each made up of a selected configuration of adjustable electrical components. A subtractor device is coupled to the lattice stages for providing a succession of error terms. The error terms are an accumulation of the squares of a number of error quantities, which are the differences between a sequence of undistorted training signals or estimates of the transmitted signal which are received by the subtractor device, and the same training signals after they have travelled through the data transmission channel. A delayed stage and two dimensionale vector matrices are coupled in each of the lattice stages for iteratively adjusting their components in accordance with a least squares procedure, that is, the components are adjusted each time a signal is received and the iterative adjustment continues until a prespecified error limit is reached. Write: **PAT-APPL-6-259 130**, NAVY.

Circuit for Calculating the Position of the Eye/312

Circuit de calcul de la position de l'oeil/312

Filed May 11, 1981, by the Department of the Navy. An eye position measurement circuit is disclosed for calculating the position of the cornea of the human eye. The eye position measurement circuit includes a dual axis infrared light detector which will sense the position of the cornea of the eye upon receiving pulsed infrared light reflected from the cornea of the eye. The dual axis infrared light detector is, in turn, connected in unique combination with filters, absolute value circuits, analog-to-digital converters, latches, a digital computer, and other electronic components for calculating the position of the cornea of the human eye. Write: **PAT-APPL-6-262 152**, NAVY.

Helmet Mounted Eye Tracker Using a Position Sensing Detector/312

Suiveur de mouvements oculaires monté sur casque, utilisant un détecteur à faisceau infrarouge/312

Filed May 11, 1981, by the Department of the Navy. A helmet mounted eye tracker is disclosed for monitoring the position of the cornea of human eye which includes an infrared light source for projecting a pulsed infrared light beam along a first optical path, a mirror for redirecting the pulsed infrared light beam along a second optical path, and a beam splitter for redirecting the pulsed infrared light beam onto the cornea of the eye such that within the eye a virtual image is formed which changes position with movement in the cornea of the eye. The virtual image formed within the eye is then redirected along the second optical path by the beam splitter to the mirror which, in turn, redirects the virtual image to a collecting lens positioned along the first optical path. The collecting lens will then focus the virtual image upon the active area of an infrared light detector which will provide at its output square wave signals indicative of the X and Y coordinate positions of the cornea of the eye within the active area of the infrared light detector. Write: **PAT-APPL-6-262 153**, NAVY.

A Tear Resistant Flexible Cable/312

Câble souple résistant au sectionnement/312

Filed May 28, 1981, by the Department of the Navy. Accordingly, the present invention provides a tear resistant flexible cable of Kapton/Pyrolux/Teflon construction. Cable conductors are imbedded in Pyrolux material which is then coated with Kapton. A non-redundant layer of Teflon is then coated over the Kapton. An additional layer of Kapton may be added if desired. Therefore, it is an object of the present invention to provide a flexible cable having good tear resistance while maintaining the advantages of current cable construction. Other objects, advantages and novel features of the present invention will be apparent from the following detailed description when read in conjunction with the appended claims and attached drawing. Write: **PAT-APPL-6-267 305**, NAVY.

Solid State Magnetron/312

Magnétron à état solide/312

Filed June 2, 1981, by the Department of the Navy. This application discloses a magnetron in which the space between the anode and cathode contains a high mobility semiconductor. The structure is non-cylindrically symmetric because the anode and cathode are placed on top of the semi-conductor. The electrons are injected into the substrate and then accelerated toward the anode members where they are extracted. Alternate anode members are strapped together to favor excitation of the pi-mode. Write: **PAT-APPL-6-269 456**, NAVY.

360-Degree Scanning Antenna/312

Antenne à balayage sur 360 degrés/312

Filed June 5, 1981, by the Department of the Navy. A 360 degree scanning antenna is disclosed which includes a mechanism for scanning the main beam of a cylindrical array in azimuth and over a limited angle in elevation in which a primary feedhorn illuminates a geodesic lens which in turn illuminates the cylindrical array structure. Energy is coupled from the parallel plate structure of the feedhorn assembly into the individual waveguides of the array via dielectric wedges extending from the waveguides. Scanning in elevation is accomplished by changing the transmitter frequency and in azimuth by rotating the primary feedhorn assembly. Write: **PAT-APPL-6-271 056**, NAVY.

A Single Element Cantilever Mounted Shear Wave Transducer/312

Transducteur monobloc de mesure des ondes de cisaillement, monté en porte-à-faux/312

Filed July 11, 1981, by the Department of the Navy. The present invention relates to a single element cantilever-mounted acoustic transducer for measuring shear wave attenuation in sediments. Such a transducer takes advantage of the transverse vibration of a piezoceramic bimorph element mounted as a cantilever on a heavy slug. A gasket material between the slug and an inner holding tube assists in avoiding the propagation of undesirable compressional wave energy into transmission medium surrounding the transducer. Electrical isolation is achieved by wrapping the inner tube with a ground shield to which the ground wire is attached. A second layer of gasket material between the inner and an outer tube further inhibits the propagation of compressional wave energy into the transmission medium. A flexible potting compound seals the open end of the tubes including the bimorph element and serves as the active face of the transducer. Write: **PAT-APPL-6-272 591**, NAVY.

A Three-Axis Current Meter/312

Débitmètre à trois axes/312

Filed June 18, 1981, by the Department of the Navy. A three-axis current meter for measuring all three components of current velocity in the absence of self-interference caused by the sensor supports. Acoustic transducers for measuring the current components are mounted in 'fingers' which are pointed in the upstream direction. Two of the acoustic paths lie in a vertical plane and intersect at right angles. The third acoustic path runs between two fingers, one of which is longer than and the other shorter than those defining the first two paths. The resulting path is inclined at 450 with respect to the vertical plane. Write: **PAT-APPL-6-274 857**, NAVY.

Nephelometer/312

Néphélomètre/312

Filed June 18, 1981, by the Department of the Navy. A nephelometer and method for measuring optical quality of a marine atmosphere and particularly characterizing its aerosol particle size distribution, visual range and aerosol optical effects in the visible and infrared. There is provided a housing for entrapping a momentary aerosol sampling, a laser source for providing a narrow collimated beam of radiant energy (usually light) through the sample, and plural space-apart cosine sensors facing across the radiant energy illuminated sample, with one reading a slightly greater angle than the other, for receiving aerosol particle scattered light. Integrated outputs from the sensors when compared with laser output intensity as a reference signal provide an indication of aerosol particle size distribution and concentration. Write: **PAT-APPL-6-274 958**, NAVY.

Serial to Parallel Data Conversion Interface Circuit/312

Circuit d'interface de conversion série-parallèle de données/312

Filed June 22, 1981, by the Department of the Navy. A serial to parallel data conversion interface circuit is disclosed for converting a serial word supplied by a head tracker to a parallel word so as to allow for the processing of the parallel word by a microprocessor. The head tracker supplies to the interface circuit a data ready pulse signal. The interface circuit, in response to the data ready pulse signal, supplies a data acknowledge pulse signal and a clock signal to the head tracker so as to allow the serial word from the head tracker to be transferred to the interface circuit, which then converts the serial word to a parallel word. An enable pulse signal supplied to the interface circuit effects the transfer of the parallel word from the interface circuit to the microprocessor. A reset pulse from the microprocessor then resets the interface circuit so as to allow for the transfer of another serial word from the head tracker. Write: **PAT-APPL-6-275 564**, NAVY.

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Antacid Preparation with Prolonged Effect/312

This antacid preparation uses a new drug delivery system releasing the active ingredients at a constant predetermined rate. The formulation contains only the usual antacid ingredients such as magnesium trisilicate and magnesium oxide, mucophilic and pepsin inhibiting agents, formulated together with a special combination of surfactants, tragacanth, carboxymethycellulose and excipients. Due to its unique formulation, it will adhere and partially cover the gastric mucosa, thus enabling its active ingredients to dissolve and to neutralize the gastric acid as it is released over a prolonged period. Comparative clinical studies prove that the new preparation achieves an average neutralization period of 30 minutes above pH = 3 as compared to the maximum 16 - 18 minutes with other widely used antacid preparations. Advantages: easy to ingest; registration and health authority clearance procedures expected to be very simple; tablet or capsule form equally possible; high stability; simple and inexpensive production; the new drug delivery system can also be used for other preparations where optimal activity depends on the drug's constant availability. Results of in vitro experiments and in vivo clinical studies have been carried out in Hungary and in the USA. Production is underway in Hungary (preliminary trade name "NILACID") and a licensee has been named in Venezuela. Patented in eight countries including Canada. Code number 6030.

Complexes of Oligo- and Polygalacturonic Acids Formed with Essential Metal Ions/312

Stable chelate complexes of macro and micro elements essential for human life can be simply produced by the new technique using oligo- and polygalacturonic acids available in large amount. Absorbable to a greater extent, these biometal preparations are better utilizable and storable without undesirable harmful side-effects as compared to inorganic (e.g., sulphates) or simple organic salts or complexes (e.g., aspartate, oxalate, fumarate, citrate) used so far. Preparations especially combined with vitamins can be favourably used in many fields of the pharmaceutical and food industry. Advantages: simple production using natural com-

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Préparation antiacide à effet prolongé/312

La préparation antiacide présente un nouveau système permettant de libérer progressivement les ingrédients actifs d'une manière constante et prédéterminée. Le mélange contient les antiacides habituels, comme le trisilicate de magnésium et l'oxyde de magnésium, des substances mucophiles et des inhibiteurs de la pepsine, alliés à un mélange spécial d'agents tensio-actifs, de gomme adragante, de carboxyméthylcellulose et d'excipients. Grâce à sa formule unique, le produit adhère à la muqueuse gastrique et la recouvre en partie, de sorte que les ingrédients actifs peuvent se dissoudre et neutraliser pendant une période prolongée, l'acide gastrique au fur et à mesure qu'il se forme. Des études cliniques comparatives ont établi que la nouvelle préparation permet de maintenir en moyenne un état neutre (pH de plus de 3) pendant 30 min alors que les autres préparations antiacides d'usage répandu ne le maintiennent au maximum que pendant 16-18 min. Avantages: facile à ingérer; on prévoit obtenir facilement l'enregistrement et l'autorisation des services de santé; peut aussi être fabriqué sous forme de comprimés ou de capsules; grande stabilité; production simple et peu coûteuse; le nouveau système de libération des ingrédients actifs peut aussi s'appliquer à d'autres préparations, lorsque son efficacité dépend de la disponibilité constante du médicament. Les résultats des expériences in vitro et des études cliniques in vivo proviennent de Hongrie et des États-Unis. On a commencé la production en Hongrie et les droits d'exploitation sous licence ont été accordés à une société au Vénézuela. Ce produit est breveté dans 8 pays, y compris le Canada. Numéro de code 6030.

Complexes d'acides oligo-galacturoniques et polygalacturoniques formés avec des ions métalliques essentiels/312

Grâce à une nouvelle technique, on peut facilement produire des chélates stables de macro et de micro-éléments biologiquement essentiels, à l'aide d'acides oligo-galacturoniques et polygalacturoniques, qui sont disponibles en grande quantité. Beaucoup plus facilement absorbables, ces préparations bio-métalliques sont préférables du point de vue utilisation et entreposage, aux sels inorganiques (par ex. les sulfates), aux sels ou complexes organiques simples (par ex. aspartate, oxalate, fumarate, citrate) employés jusqu'à maintenant. Par ailleurs, ils ne présentent pas d'effets secondaires indésirables ou dangereux. Spéciale-

plexes forming biopolymers readily available; chemically and biologically well defined composition; predetermined and reproducible biological effect; can be used for treating deficiency of essential metal elements in humans, e.g., iron (II), copper (I), copper (II), magnesium (II), cobalt (II), manganese (II), zinc (II), chromium (III), molybdenum (V), vanadium (IV) and nickel (II); due to good enteral stability and low molecular weight composition will be absorbed from bowels; easily pass through the cell membrane in their original form and react with transport proteins or with the mucopolysacharides of the cells; resorption is better as compared to usual inorganic or simple organic salts or complexes. A pilot plant is in operation at the CENTRAL RESEARCH INSTITUTE FOR CHEMISTRY of the Hungarian Academy of Sciences, Budapest and patents are granted or applied in 15 countries. Code number 80087.

ment combinées aux vitamines, ces préparations peuvent trouver des applications avantageuses dans de nombreux secteurs de l'industrie pharmaceutique et alimentaire. Avantages: fabrication simple au moyen de biopolymères naturels complexables facilement disponibles; composition bien définie du point de vue chimique et biologique; exercent un effet biologique prédéterminé et reproductible; peut servir à traiter des carences en éléments métalliques essentiels chez l'homme, par exemple, carence en fer (II), cuivre (I), cuivre (II), magnésium (II), cobalt (II), manganèse (II), zinc (II), chrome (III), molybdène (V), vanadium (IV) et nickel (II); leur stabilité entérique et leur masse moléculaire peut élevée leur permettront d'être absorbées par l'intestin; traversent facilement la membrane cellulaire sous leur forme originale ou sous forme de sels et réagit avec les protéines assurant le transport ou avec les mucopolysaccharides cellulaires; meilleure résorption par rapport aux sels inorganiques habituels ou aux simples sels ou complexes organiques. Une usine pilote est présentement en exploitation au CENTRAL RESEARCH INSTITUTE FOR CHEMISTRY de l'académie hongroise des sciences, à Budapest. Quinze pays ont obtenu ou demandé les droits d'exploitation sous licence. Numéro de code 80087.

Immobilization of Enzymes and Other Active Particles/312

This new immobilization process can generally be used to localize water soluble or dispersable active particles in polymer networks by physical means. Using this new process detrimental chemical and physical effects are avoided, material loss is minimized and due to the environment similar to the natural one, the biological or other activities of the particles are retained. Advantages: very simple process, no special equipment or devices, thus no investment is needed; materials used (e.g., hydrophile polymers, copolimers) are simple, cheap and easily available; systems (membranes, granulates) produced by this process can be used both in an aqueous and a non-aqueous medium; enables production of multi-layer membranes consisting of various active layers (sandwich type structure); biologically active particles localized in the polymer network retain their activity more than in known immobilization processes; can also be used for prolonged storage of biologically active valuable materials; can advantageously be used for enzyme immobilization (colinesterase, glucoseoxidase, peroxidase, lactic acid dehydrogenase, alcohol dehydrogenase); can advantageously be used for immobilization of metal catalysts (high dispersity platinum, silver, palladium, gold). The process is used in biological, biochemical and biophysical basic and applied research, analytical chemistry, clinical diagnostics, medical science, chemical, pharmaceutical and food industries. Pilot plant experiments and comprehensive tests have been made in the Department of Colloid Science of the Eötvös Lorand University, Budapest and in the National Institute of Occupational Health. Code number 8066.

Immobilisation des enzymes et d'autres particules actives/312

Il s'agit d'un nouveau procédé d'immobilisation permettant en général de localiser par des méthodes physiques dans les réseaux de polymères les particules actives hydrosolubles ou pouvant être dispersées dans l'eau. Grâce à ce nouveau procédé, on évite les effets chimiques et physiques gênants, on réduit au minimum les pertes de produit et on maintient l'activité biologique ou autre des particules puisqu'elles se trouvent dans un milieu semblable à leur environnement naturel. Avantages: grande simplicité, absence d'équipement ou de dispositifs spéciaux, donc aucun investissement nécessaire; les produits utilisés (par ex. polymères hydrophiles et copolymères) sont simples, peu coûteux et facilement disponibles; les systèmes produits (membranes et granulats) peuvent être employés en milieu aqueux ou non aqueux; le procédé permet de produire des membranes à couches multiples comprenant diverses couches actives (structure de type sandwich); les particules biologiquement actives se trouvant dans le réseau conservent plus leur activité que celles des autres procédés d'immobilisation connus; on peut aussi utiliser ce procédé pour la conservation prolongée de produits de valeur biologiquement actifs; ce procédé peut être utilisé avantageusement pour l'immobilisation d'enzymes (cholinestérase, glucose-oxydase, peroxidase, lactate-déshydrogénase, alcool-déshydrogénase); peut aussi être utilisé avantageusement pour l'immobilisation de catalyseurs métalliques (platine, argent, palladium, or, à haute capacité de dispersion). Ce procédé est employé en recherche fondamentale et appliquée, dans les domaines de la biologie, de la biochimie, de la biophysique, de la chimie analytique, pour établir des diagnostics cliniques, en médecine et dans les industries chimique, pharmaceutique et alimentaire. Des expériences en usine pilote et des essais exhaustifs ont été effectués au département des sciences des colloides de l'université Eötvös Lorand, à Budapest, et au National Institute of Occupational Health. Numéro de code 8066.

Micromethodics for Rapid Microbiological Diagnosis/312

Called a "MIDITEST", this method developed and applied by REANAL FINE CHEMICALS, Budapest, enables the rapid and safe identification of bacteria by simple means. 1-2 drops of the MIDITESTs are admixed to a concentrated suspension of the bacterium (with high germ count) or fungus on a special titrating place. After incubating the so-produced "microculture" for 4 to 12 hours the reactions are assessed. If required, accessory tests may be performed in the same operation using other materials and devices of the MIDITESTs. The method is thus both complex and rapid. Other advantages: general validity, simple, does not require special skills, materials or devices and it is not labour intensive; can be applied even under extraordinary conditions; can be combined with any other method and its materials and reagents are applicable also for conventional tests; economical and requires fewer accessory procedures than the conventional methods; easy large scale production without additional investment. The fields of application are: therapeutics, veterinary and human hygiene, the food and the pharmaceutical industries; epidemiological laboratories, "techminimum" and special purpose laboratories, or for a simplification of the work in centralised laboratories. Code number 7023.

Méthode destinée à un diagnostic microbiologique rapide/312

La présente méthode, appelée "MIDITEST", élaborée et appliquée par REANAL FINE CHEMICALS à Budapest, permet d'identifier simplement des bactéries de façon rapide et sûre. Le procédé consiste à ajouter sur une plaque de titrage spéciale 1 à 2 gouttes de solution MIDITEST à une suspension concentrée de la bactérie (à numération élevée de germes) ou du champignon. Après avoir incubé la "microculture" ainsi produite pendant 4 et 12 heures, on évalue les réactions. Il est également possible d'effectuer des essais ultérieurs de la même façon, en utilisant les produits et l'appareillage des MIDITEST. La méthode est complexe et rapide. Elle offre d'autres avantages: validité généralement acquise, simplicité, ne requiert aucune aptitude particulière, ni dispositifs ni produits spéciaux ni main-d'oeuvre importante; cette méthode peut s'appliquer dans des conditions inhabituelles, combinée à une autre méthode; ses produits et ses réactifs sont utilisables dans d'autres tests classiques; il s'agit d'une méthode économique nécessitant moins de procédés accessoires que les méthodes classiques, pouvant être produite à grande échelle sans frais supplémentaires. Les domaines d'application sont: thérapeutique, hygiène vétérinaire et humaine, industrie alimentaire et pharmaceutique, laboratoires épidémiologiques, laboratoires "miniatures" et spéciaux, simplification du travail dans les laboratoires centralisés. Numéro de code 7023.

Licenses from Japan

Know-how licensing rights are offered by four Japanese companies. Interested manufacturers may obtain additional information or initiate negotiations by contacting (quoting title and reference number) International Department, The Foundation of Osaka Science and Technology Center, 1-8-4, Utsubo Hommachi, Nishi-ku, Osaka, Japan. Please send a copy of your initial correspondence to the Commercial Division, Canadian Embassy, 3-38 Akasaka 6-Chome, Minato-ku, Tokyo 107, Japan.

High Purity CO Gas and High Precision CO Mixed Gas Manufacturing Technology/312

SEITETSU KAGAKU CO., LTD. offers to license in Canada their own high purity carbon monoxide generating and high precision carbon monoxide mixed gas blending system and technology. This mixed gas is used for measuring the reducibility of iron ores. Reference number SE2-12(6-66).

Manufacturing Method of Agent for Blood Serum Separation/312

Blood can be easily divided into a serum and a cruor by using this separating agent at the clinical laboratory. The agent is a type of water-insoluble polymer gel having such characteristics as to form a separating layer between the serum and the cruor. The conventional centrifugal separation of the blood can be improved in its handling time and accuracy. Polymer gel used does not adversely affect analytical results nor instruments. Used in clinical blood tests, this patented method has been developed by the SEKISUI CHEMICAL CO., LTD. which is offering patent and know-how licensing to Canadian industry. Reference number SE1-7(5-2).

Manufacturing Method of Electrical Heating Plate from Plastics/312

Plate type heaters are made by hot press molding from FRP in which a special conductive substance is homogeniously dispersed. The resultant plates offer not only excellent properties for both electrical and mechanical uses but a wide variety of applications such as home use, fermentation, livestock industry, freezing prevention of road surface, and other industrial purposes. Usual FRP molding process can be applied. The method features high mechanical strength and hardness; larger surface heating; uniform and quick elevation of temperatures; high durability and insulating characteristics; ambient temperature range −40°C — 120°C; power 1.5 KW/m^2; and, mechanical proper-

Produits nouveaux du Japon

Quatre compagnies japonaises offrent les droits d'exploitation sous licence de nouveaux produits et de nouveaux procédés. Les fabricants intéressés peuvent obtenir de plus amples renseignements en écrivant à l'adresse suivante (en citant le titre et le numéro de référence): International Department, The Foundation of Osaka Science and Technology Center, 1-8-4, Utsubo Hommachi, Nishi-ku, Osaka (Japon). Prière d'envoyer une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 3-38 Akasaka 7-Chome, Minato-ku, Tokyo 107 (Japon).

Technique de production de CO de haute pureté et de mélanges de haute précision à base de CO/312

SEITETSU KAGAKU CO., LTD. offre sous licence au Canada leurs systèmes et leurs techniques de production de monoxyde de carbone de haute pureté et de mélanges haute précision de gaz et de monoxyde de carbone. Ces mélanges de gaz sont utilisés pour mesurer les capacités réductrices de minerais de fer. Numéro de référence: SE2-12(6-66)

Méthode de fabrication d'un agent de séparation du sérum sanguin/312

Le sang peut facilement être séparé au laboratoire clinique en sérum et caillot en utilisant cet agent de séparation. Il s'agit d'un gel formé d'un polymère insoluble dans l'eau dont les caractéristiques lui permettent de former une couche séparatrice entre le sérum et le caillot. La séparation classique du sang par centrifugation peut être améliorée des points de vue du temps de traitement et de la précision. Le gel de polymère utilisé n'a pas d'effet nuisible sur les résultats analytiques ou les appareils. Cette méthode brevetée utilisée pour les tests sanguins cliniques a été mise au point par SEKISUI CHEMICAL CO. LTD. qui en offre le brevet et l'expertise technique à l'industrie canadienne. Numéro de référence: SE1-7(5-2).

Méthode de fabrication de plaques chauffantes en plastique/312

Les plaques chauffantes sont constituées d'un mélange homogène de FRP et d'une substance conductrice spéciale. La plaque, qui comporte d'excellentes propriétés électriques et mécaniques, convient aux utilisations suivantes: usage domestique, fermentation, industrie du bétail, protection de la surface des routes contre le gel et autres usages industriels. La plaque est fabriquée selon le procédé habituel de moulage du FRP. Elle présente les caractéristiques suivantes: résistance et dureté supérieures, grande surface de chauffage, température uniforme, réaction rapide aux sollicitations thermiques, très grande durabilité, très bonnes propriétés isolantes, plage des températures de ser-

ties almost the same as FRP. Patents are pending in Japan and patent and know-how licensing is offered in Canada by the SEKISUI CHEMICAL CO., LTD. Reference number SE1-8(6-63).

vice comprise entre -40°C et 120°C, consommation de 1,5 kW/m^2 et propriétés mécaniques similaires à celles du FRP. Le produit fait actuellement l'objet d'une demande de brevet au Japon. La SEKISUI CHEMICAL CO., LTD. souhaite céder ses droits de fabrication, y compris le know-how, à une compagnie canadienne. Numéro de référence: SE1-8 (6-63).

Manufacturing Method of Fumaronitrile and Maleonitrile/312

TAKEDA CHEMICAL INDUSTRIES, LTD. offers to license in Canada its own process and technology for manufacturing fumaronitrile and maleonitrile having application in the pharmaceutical, fungicide, herbicide, heat-resistant resins and organic semiconductor industries. Raw materials: C_4 fraction (butadiene, butane and/or butene) ammonia. The process is by ammoxidation. Patents are pending. Advantages are compared with the conventional method: raw materials are easily available and inexpensive; consumption of raw materials is small and product yield is high; operation can be done using the conventional fixed bed. Reference number TA11-1(6-64).

Méthode de fabrication du fumaronitrile et du maléonitrile/312

La TAKEDA CHEMICAL INDUSTRIES, LTD. offre les droits d'exploitation sous licence au Canada d'un procédé qu'elle a mis au point pour fabriquer du fumaronitrile et du maléonitrile. Ces produits possèdent des applications dans l'industrie des produits pharmaceutiques, des fongicides, des herbicides, des résines thermo-résistantes et des semiconducteurs organiques. Il utilise comme produits de départ un C_4 (butadiène, butane et/ou butène) et de l'ammoniac. La réaction est une ammoxydation. Une demande de brevet a été présentée. Avantages par rapport à la méthode classique: produits de départ peu coûteux et facilement disponibles; faible consommation de produits de départ et rendement élevé; possibilité de réaliser la réaction sur un lit fixe classique. Numéro de référence: TA11-1(6-64).

Manufacturing Technology of Standard Gases/312

SEITETSU KAGAKU CO., LTD. offers know-how licensing for its manufacturing technology of various gases for calibration of analyzers used in the fields of air pollution control, industrial processes, etc. The types of gases include: standard, zero, mixed, pure, doping, sterilizing, standard gas dilution system, etc. Reference number SE2-11(6-65).

Technique de production de gaz étalons/312

SEITETSU KAGAKU CO., LTD. offre sous licence son expertise dans le domaine de la production de divers gaz pour l'étalonnage des analyseurs utilisés dans la lutte contre la pollution, les processus industriels, etc. Parmi les types de gaz citons: étalon, zéro, mélangé, pur, dopé, stérilisé, dilution normalisée, etc. Numéro de référence: SE2-11(6-65).

Needle Defect Detector Apparatus for Circular Knitting Machines/312

SINKO ELECTRIC AND INSTRUMENTATION CO., LTD. offers a Canadian company the licensing rights to an apparatus for detecting defects in needles for circular knitting machines. In a photo-electric detection system it is difficult to detect defects in pattern knitting or colored pattern knitting. Most of the knitting defects or defective stitches are attributable to malfunctions or defects of the knitting needles. In case of the circular knitting machine, the detection must be made at a position adjacent to the yarn feeder or at the position where the needles are at least partially projected. Accordingly, it is necessary to use a detector of a very small size. The present invention has overcome the above difficulties by using an optical fiber of fiber bundle having a diameter of ca. 0.5 mm as the detector head. The apparatus comprises at least an optical fiber having an end of a small sectional area and disposed to detect light reflections from one of hooks or latch portinos of dial and cylinder needles mounted on the circular knitting machine, a light receiver unit operatively coupled to the other end of the optical fiber and including a photoelectric converter element, and an electric circuit for transforming a variation in signal representative of the light reflections produced by the light receiver unit into a corresponding variation of an electrical quantity. In this invention possible breaking or bending of the hook or defects

Détecteur d'aiguilles défectueuses pour machines à tricot rond/312

La SINKO ELECTRIC AND INSTRUMENTATION CO., LTD. est à la recherche d'une compagnie canadienne intéressée à acquérir les droits de fabrication sous licence du détecteur d'aiguilles défectueuses pour machines à tricot rond. Les détecteurs photo-électriques décèlent mal les défauts dans les mailles et les couleurs du tricot. La plupart des défauts du tricot (ou des mailles incorrectes) sont attribuables à un mauvais fonctionnement des aiguilles ou à la présence d'aiguilles défectueuses. Les défectuosités doivent être décelées près du mécanisme d'alimentation en fil ou à l'endroit où les aiguilles sont partiellement apparentes; le détecteur doit, par conséquent, être de très petite taille. L'invention qui permet de résoudre le problème, comporte une fibre optique faisant partie d'un faisceau d'environ 0,5 mm de diamètre et constituant l'extrémité supérieure du détecteur. Celui-ci comporte au moins une fibre optique à extrémité fine, disposée pour déceler la réflexion de la lumière provenant de la partie-crochet des aiguilles (cylindriques et autres), un capteur de lumière relié à l'autre extrémité de la fibre, y compris un convertisseur photo-électrique, ainsi qu'un circuit électrique servant à transformer le signal lumineux produit par le capteur en influx électriques. Ainsi les bris et les courbures indésirables du crochet de même que toute autre défectuosité de l'aiguille sont décelés, ce qui se traduit par l'élimination des défauts dans le tricot.

of the latch or similar undesirable conditions of the knitting needles are detected thereby preventing knitting defects from being produced in the knitted web. Reference number SH5-1(15-11).

Simulated Ambient Chamber for Plant Growth Experimentation/312

SEITETSU KAGAKU CO., LTD. offers to license in Canada its know-how on a controlling facility to maintain and to arbitrarily program various single constituent or conjugated parts of air pollution gases, other than various environmental factors, in order to analyze the effects upon the growth of plants under exposure to ambient pollutants. Used in pollution control, know-how licensing is available. Reference number SE2-13(6-67).

Numéro de référence: SH5-1 (15-11).

Phytotron pour étudier la croissance des plantes/312

SEITETSU KAGAKU CO., LTD. offre au Canada la licence de son appareillage de régulation permettant de maintenir et de programmer arbitrairement divers constituants, seuls ou en mélange, de gaz polluants ainsi que divers autres paramètres environnementaux, pour analyser les effets sur la croissance des plantes de l'exposition à des polluants du milieu. Utilisation dans la lutte contre la pollution, possibilités d'obtenir une licence concernant l'expertise. Numéro de référence: SE2-13(6-67).

Licenses from Mosaic Enterprises, Inc., U.S.A.

The following products are offered for manufacture under license in Canada on behalf of the manufacturers by: Mr. Frank Brkic, Mosaic Enterprises, Inc., P.O. Box 667, Arlington, Virginia 22216, tel: (202) 659-2880. Please advise the Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102 of any interest expressed in any of these products so that he may provide liaison, commercial information to prospective licensees and/or licensors as well as any other appropriate assistance you may require. The Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5 should be advised of any agreements concluded in order that future enquirers are advised that a license has been granted.

Carton Sizer/312

A tool for making too big a carton into the right size box by scoring corrugated cartons to size and fit and folding down the sides and ends. The device permits the scoring and folding of a carton five times faster than other methods; a saving in staffing and shipping charges, and there is no need to maintain inventories of cartons in all sizes as cartons that fit exactly are easy to make. (See illustration page 40.)

Drill/312

The Amfire Waterdrill™ is a portable water-powered drilling and extinguishing tool which represents an important new concept in firefighting technology. Attached to the end of a 3.75 cm line, the Amfire Waterdrill uses water from the pumper both as the power medium for the drill bit and also as the extinguishing agent. This patented device thereby permits firefighters to drill quickly through almost any type of structure and direct a spray of water into inaccessible or difficult-to-reach areas. By allowing almost totally oxygen-free entry, the tool prevents "backdraft"; is also an important new means of utilizing the indirect attack method of firefighting; provides fast entry; reduces fatigue; reduces hazards exposure; minimizes structural damage; is a safe and dependable power supply; and, operates quietly. (See illustration page 40.)

Material Handling/312

A safe, fast and pushbutton easy portable battery-operated, power truck with a 675 kg capacity which permits one

Licences offertes par Mosaïc Enterprises, Inc., É.-U.

Les produits suivants sont offerts pour fabrication sous licence au Canada et pour le compte des fabricants par: M. Frank Brkic, Mosaïc Enterprises, Inc., P.O. Box 667, Arlington (Virginie) 22216, n° de tél: (202) 659-2880. Si l'un de ces produits vous intéresse, veuillez communiquer avec le Consulat du Canada, 3 Parkway Building, Suite 1310, Philadelphie (Pennsylvanie) 19102, qui se chargera de la liaison, d'obtenir des renseignements de nature commerciale à l'intention des preneurs et (ou) des donneurs éventuels de licences, et de fournir toute autre aide nécessaire. Par ailleurs, la Section des possibilités de licences (34/3), Centre des entreprises, ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5, doit être avisée de toute entente conclue afin qu'elle puisse indiquer à toute personne qui en fera ultérieurement la demande qu'une licence a été accordée.

Dimensionneur de boîtes de carton (Carton Sizer)/312

Il s'agit d'un outil servant à réduire les dimensions d'une boîte de carton pour en faire une autre de la taille voulue; il suffit d'entailler les boîtes de carton ondulé et d'en replier les côtés et les bouts. Cet outil permet d'entailler et de plier une boîte cinq fois plus vite que toute autre méthode; il permet aussi une économie de personnel et de coûts de transport. Il n'est plus nécessaire de tenir des stocks de boîtes de toutes dimensions, car il est facile d'en fabriquer de la taille voulue. (Voir l'illustration page 40).

Perceuse/312

L'appareil Amfire Waterdrill[MC] est un outil portatif d'extinction et de perçage actionné à l'eau. Il représente une importante innovation dans la technique de lutte contre les incendies. Branché au bout d'un tuyau de 3,75 cm, l'appareil Amfire Waterdrill est alimenté en eau à partir d'une pompe; l'eau sert aussi bien d'agent d'entraînement du foret que d'agent extincteur. Ce dispositif breveté permet donc aux pompiers de percer des trous dans presque n'importe quelle structure et de diriger un jet d'eau dans des endroits inaccessibles ou difficiles d'accès. En supprimant presque entièrement l'entrée d'oxygène, l'outil empêche tout contre-courant d'air; l'appareil constitue aussi un important nouveau moyen d'utiliser une attaque indirecte dans la lutte contre les incendies; il permet un accès rapide, réduit, la fatigue et les expositions aux dangers ainsi que les dommages aux structures; il représente aussi une source d'énergie sûre et fiable en plus d'être silencieux. (Voir l'illustration page 40).

Manutention/312

Le LECTRO TRUCK est un chariot électrique rapide d'une capacité de 675 kg, à commande par boutons-poussoirs; il

worker to move heavy and awkward loads such as appliances, office equipment, machinery, barrels, boxes, etc., speedily and easily up and down stairs or to transport loads on the ground. It will double as a power tailgate by lifting or raising loads into position; loads can be balanced in the tipped position; the truck pivots easily in tight spots; and goes around corners, even on stairs. It is of rugged all steel construction with a heavy-duty motor, strong lead screw and wide-tread tires that roll easily over rough surfaces. (See illustration page 40.)

Multi-Imaging Cameras/312

A series of small compact self-contained multi-imaging cameras designed to be rack-mounted along with a compact ultrasound scanner, measuring only 40 cm wide, 57.5 cm deep and 23.75 cm high. The fixed lens system's only moving part is the shutter which is electro-magnetically operated. The portable imagers used on portable gamma cameras for patient studies, are handled, among others, by mobile diagnostic laboratories. They feature separate contrast and brightness control, switch-selected video inversion, dark slide alarm to insure proper exposure on film, separate LED position readout for each image, color coded LED indicating exposure sequence, red/exposed, green/unexposed, blinking/exposure position and are said to have the longest focal length of any portable imagers.

Trailer/312

A tip and low-load trailer with a ratchet to raise the skip body at the front and lower the rear for eady loading of awkward or heavy goods which can be winched on board and for easy unloading of loose materials by one person. Ratchet restores skip to horizontal position and locks drawbar at different angles. The unique "Dumpling" principle is ideally suited to customising for specialized loads, resulting in outstanding transport economies. (See illustration page 40.)

sert à manipuler, dans les escaliers et sur le sol, en toute sécurité et avec rapidité, des objets lourds et encombrants comme des appareils ménagers, du matériel de bureau, des machines, des barils, des boîtes, etc. Il sert d'élévateur, reste bien en équilibre une fois incliné, pivote facilement dans les espaces restreints et se déplace aisément dans les coins, même dans les escaliers. Le chariot est entièrement fait en acier robuste et il est muni d'un moteur à grand rendement, d'une vis d'entraînement solide et de roues larges qui permettent un déplacement facile sur les surfaces raboteuses. (Voir l'illustration page 40).

Appareils photographiques multi-imageurs/312

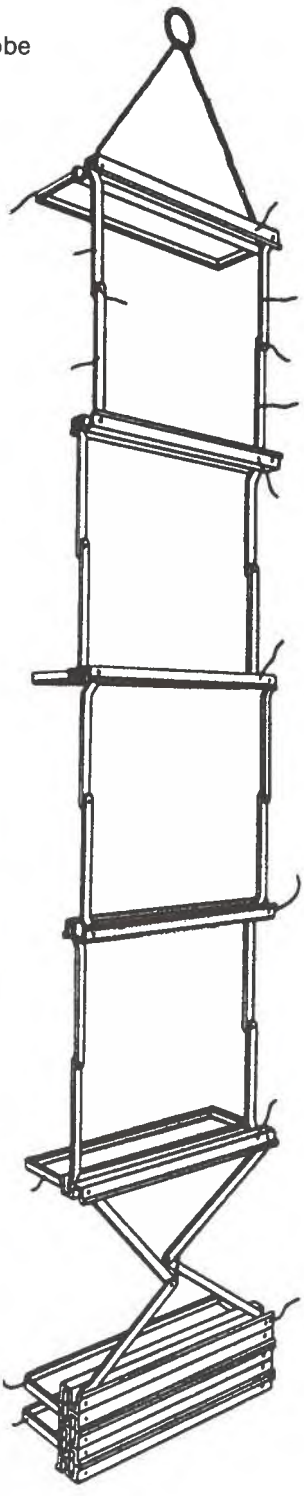
Ces appareils photographiques multi-imageurs, prévus pour montage sur baie normalisée avec un dispositif compact de balayage ultrasonore, ont un faible encombrement: 40 cm de largeur sur 57.5 cm de profondeur sur 23.75 cm de hauteur. La seule pièce mobile de l'optique à lentilles fixes est est l'obturateur, commandé par un dispositif électromagnétique. Les appareils imageurs portatifs servant avec les caméras gamma portatives à l'examen des patients sont utilisés, entre autres, par les laboratoires mobiles de diagnostic. Ils sont munis de commandes séparées de contraste et de luminosité, d'un sélecteur d'inversion vidéo, d'une alarme de cache noir pour assurer l'exposition correcte du film, d'un affichage individuel de position à diodes électroluminescentes (DÉL) pour chaque image, et d'un indicateur multicouleur de séquence d'exposition à DÉL: rouge si le film a été exposé, vert s'il n'a pas été exposé et clignotant si la prise de vues est en cours. Ces appareils sont réputés posséder la plus longue distance focale de tous les dispositifs imageurs portatifs.

Remorque/312

Il s'agit d'une remorque dont la benne basculante se soulève à l'avant et s'abaisse à l'arrière au moyen d'un rochet pour permettre à une seule personne de charger des objets lourds ou encombrants ou de décharger des matériaux en vrac. Il suffit d'utiliser le rochet pour bloquer la benne à l'horizontale ou dans la position voulue. Le principe "Dumpling" unique en son genre est la réponse parfaite à des besoins individuels et constitue une solution remarquablement économique. (Voir l'illustration page 40).

Emergency Folding Ladder
(See page 7)
Échelle de secours repliable
(Voir page 7) ▼

Inductive Speed Measuring Probe
(See page 3)
Dispositif de mesure de la
vitesse par induction
(Voir page 3)
◄



Garbage Collector (See page 4)
Benne à ordures (Voir page 4)
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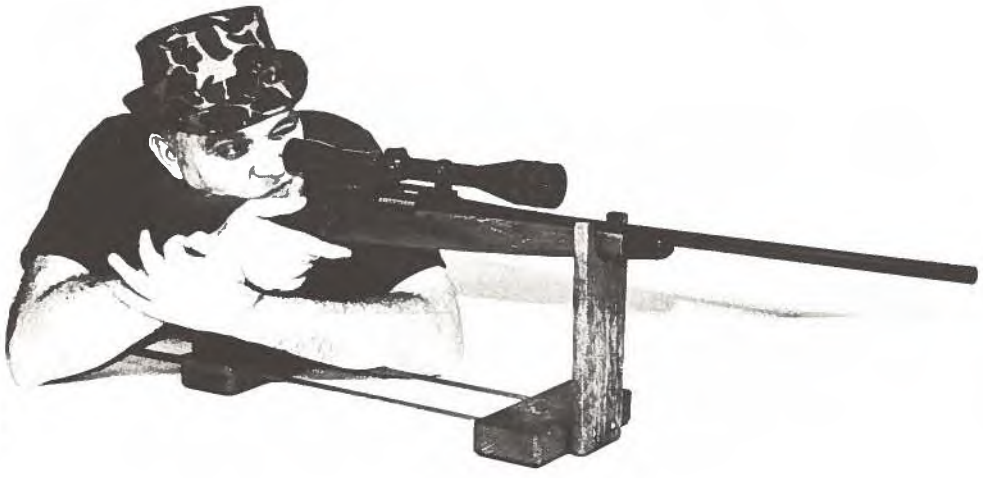
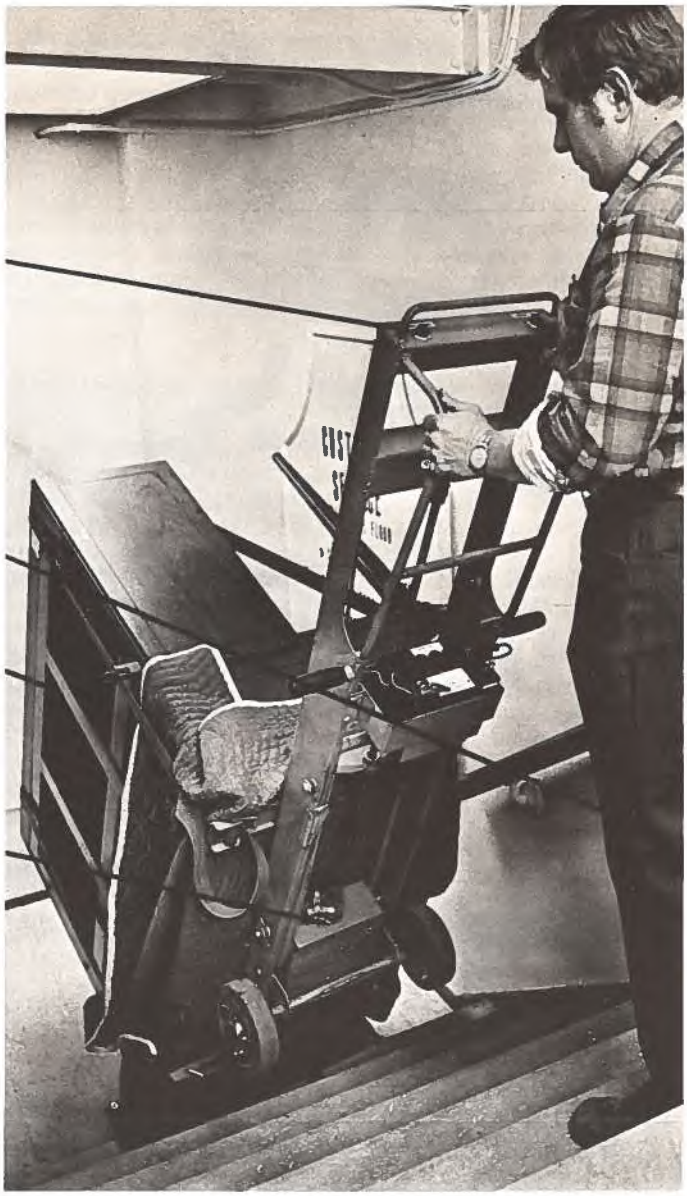
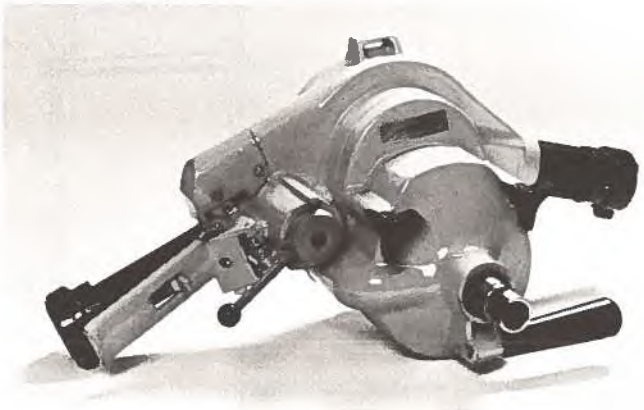


◄
Sliding Rifle Rest
(See page 6)
Support de carabine coulissant
(Voir page 6)

Game (See page 9) ▲
Jeu (Voir page 9)



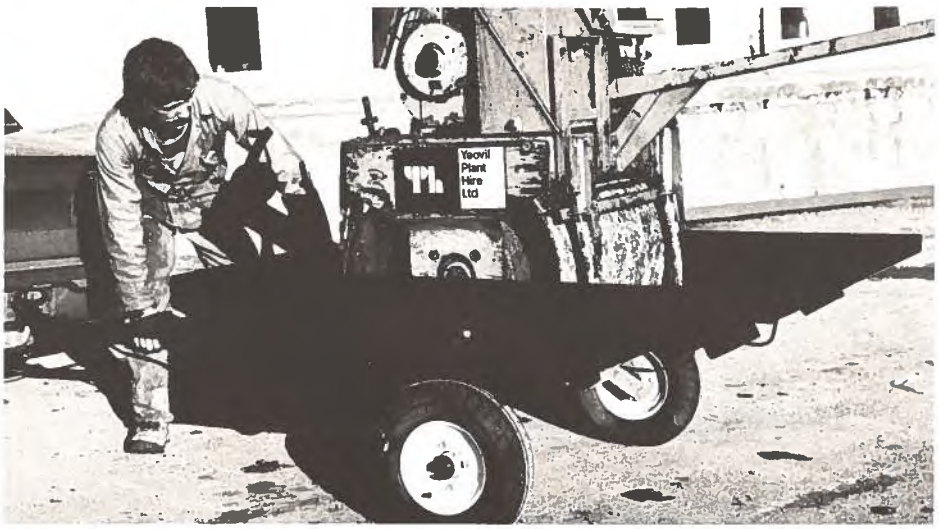
▼ Drill (See page 37)
Perceuse (Voir page 37)



Carton Sizer
(See page 37) ▼
Dimensionneur de boîtes de carton
(Carton Sizer) (Voir page 37)

Material Handling (See page 37)
Manutention (Voir page 37) ▲

▼ Trailer (See page 38)
Remorque (Voir page 38)



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