

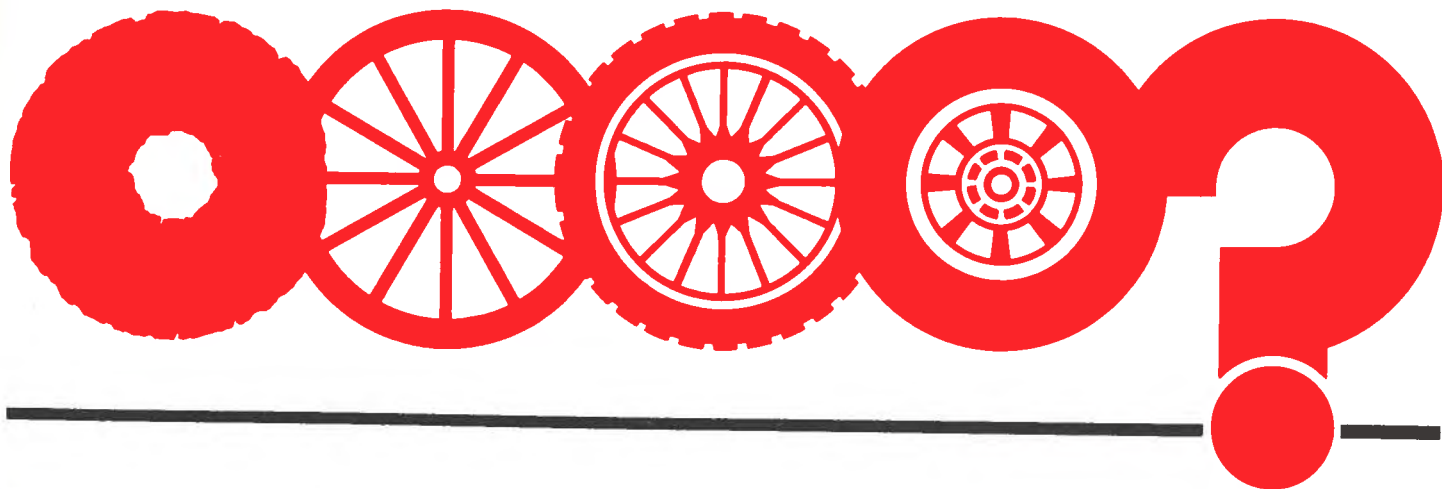
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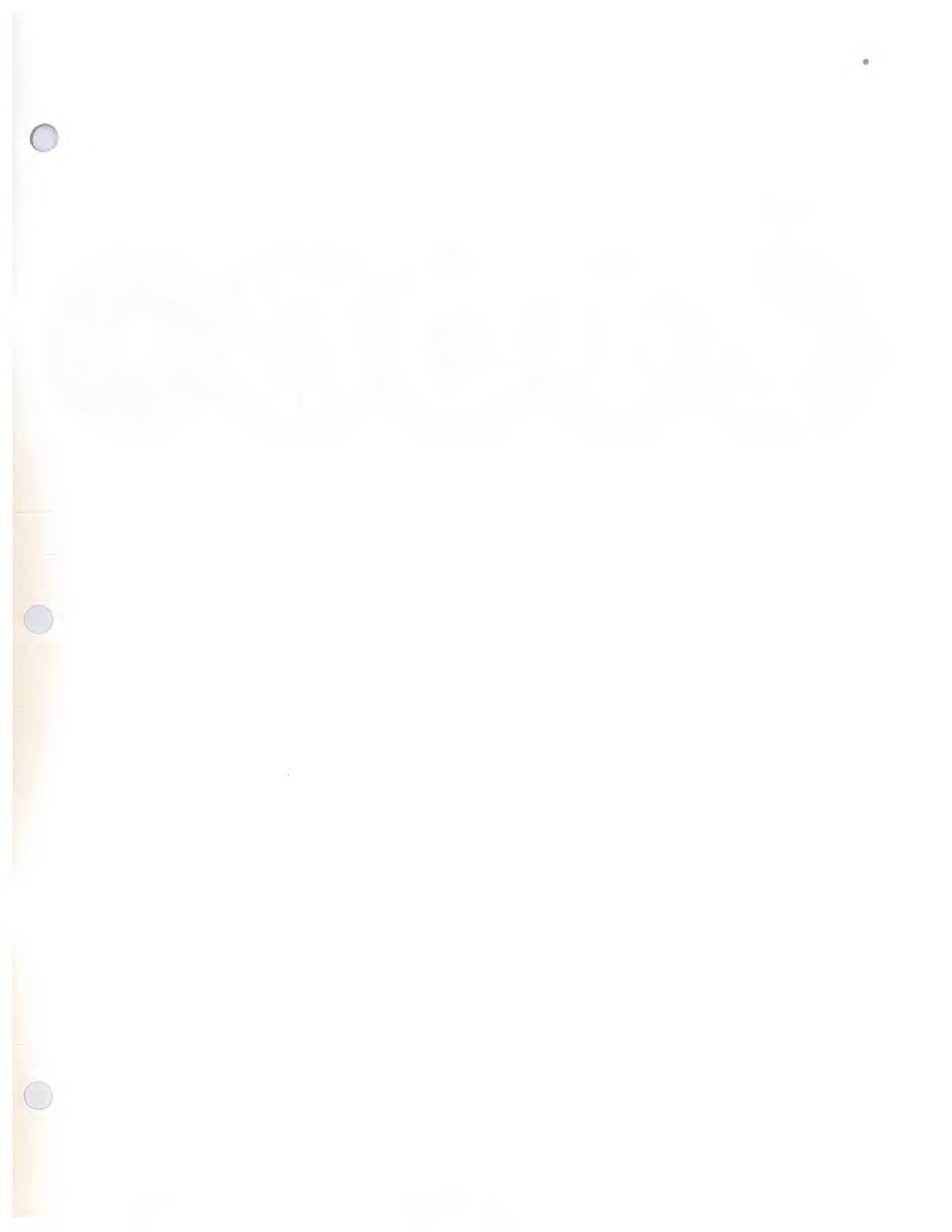
# new products bulletin

Bulletin 302, March 1981

# bulletin de produits nouveaux

Bulletin 302, Mars 1981





# new products bulletin

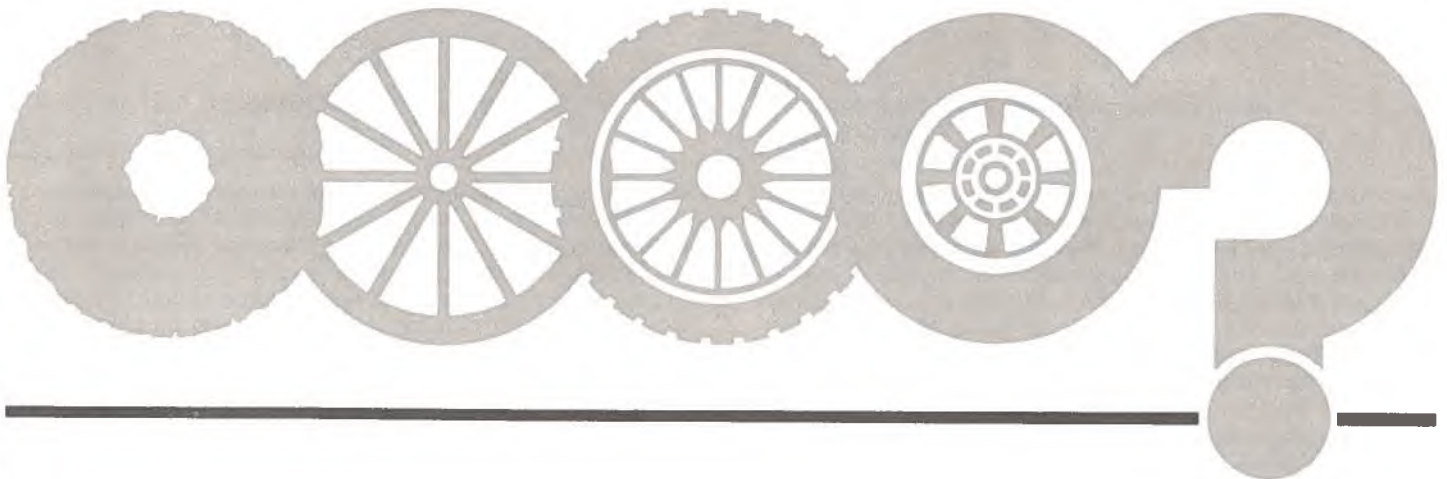
This monthly bulletin is published to inform Canadian industry of licensing and joint venture opportunities that may be investigated for the purpose of forming manufacturing affiliations. The Department cannot assume any responsibility for claims made or for transactions which ensue from the publication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

# bulletin de produits nouveaux

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 publication.



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## List of Contents

## Page Table des matières

<b>Selected Licensing or Joint Venture Manufacturing Opportunities</b>	<b>3</b>	<b>Sélection d'occasions de fabrication sous licence ou d'entreprises en participation</b>
<b>Canadian Patents Available for Licensing or Sale Issued January 1981</b>	<b>7</b>	<b>Liste des brevets canadiens disponibles pour octroi de licence ou vente délivrés en janvier 1981</b>
<b>United States Government Patent Applications Available for U.S. and Possibly Foreign Licensing</b>	<b>16</b>	<b>Demandes de brevet adressées au gouvernement des États-Unis pour l'obtention de licences américaines et étrangères éventuellement disponibles</b>
<b>Licensing Opportunities Through Control Data Worldtech, Inc., U.S.</b>	<b>35</b>	<b>Possibilités d'acquisition de licences par l'intermédiaire de la Control Data Worldtech, Inc., É.-U.</b>

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## **Selected Licensing or Joint Venture Manufacturing Opportunities**

### **Packed Bed Filter for Hot Gases/302**

A packed particulate bed is used to filter fine particles from a hot gas stream. Parallel sector construction allows continuous filtering during the unique bed cleaning and rejuvenation operations. The packed bed captures particles as small as 1 micron with higher than 99% efficiency. Write: Case 5279, 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.

### **Sur-Lock® Plywood Pallets/302**

American manufacturer of patented combination plywood and steel pallets offers Canadian production and marketing rights for this product in Canada under a licensing arrangement. The process consists of fastening top and bottom plywood decks of a pallet with short lengths of cold-rolled electric welded steel tubing. The tubing is compression flanged against the plywood forming a sturdy tension-compression bond between the steel and the plywood. Although costlier than regular hardwood pallets initially, the American manufacturer claims that because of superior strength, durability, lighter weight and versatility the product is highly competitive. Licensor will provide information on start-up, manufacturing, costing and marketing and will sell necessary production equipment or supply steel components from U.S. facility. Write: Lomar Trading Company Limited, 1384 Tyandaga Park Drive, Burlington, Ontario L7P 1N3 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

### **Disinfectant for Soft Contact Lenses/302**

American inventor offers a Canadian company the licensing rights to its disinfectant for soft contact lenses on which a patent is pending in the U.S. Current cold, chemical disinfectants accepted by regulatory agencies are based on two organic chemical substances; chlorhexidine, a cationic nitrogen compound, and thimerosal, a mercurial compound. Both have several disadvantages. For example, chlorhexidine is adsorbed by the lens and is subsequently transferred to and adsorbed by the ocular tissue, causing irritation. This invention is based on different substances which eliminate the disadvantages. The substances are available and are economical. Write: Dr. Murray Jelling, 21 Spring Hill Road, Roslyn Heights, New York 11577 and

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

### **Filtre à couche de particules pour gaz chauds/302**

Couche de particules agglomérées destinée à filtrer les fines particules dans un courant de gaz chaud. Un montage en parallèle permet un filtrage permanent lors des phases inédites de nettoyage et de régénération de la couche filtrante. Cette dernière retient, avec un rendement supérieur à 99 %, des particules mesurant jusqu'à un micron. Écrire: Cas 5279, 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.

### **Palettes de contre-plaqué Sur-Lock® /302**

Un fabricant américain de palettes brevetées faites de contre-plaqué et d'acier offre les droits de production et de commercialisation pour le Canada par l'octroi d'une licence. Il s'agit de relier les planchers supérieur et inférieur de la palette, faits de contre-plaqué, par de courts tubes d'acier écroui soudés à l'électricité. Les tubes ont des brides façonnées par compression contre le contre-plaqué, assurant une liaison solide (tension et compression simultanées) entre l'acier et le bois. Malgré son coût initial supérieur à celui des palettes de bois dur, le fabricant américain déclare que son produit est très compétitif par suite de sa résistance supérieure, de sa durabilité, de sa légèreté et de sa souplesse d'emploi. Le donneur de la licence fournira les données nécessaires pour le démarrage, la fabrication, l'évaluation des coûts et la commercialisation; en outre, il vendra le matériel de fabrication ou fournira les pièces en acier depuis son installation aux États-Unis. Écrire à: Lomar Trading Company Limited, 1384 Tyandaga Park Drive, Burlington, Ontario L7P 1N3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, Ministère de l'Industrie et du Commerce, Ottawa (Ontario) K1A 0H5.

### **Désinfectant pour lentilles cornéennes souples/302**

Un inventeur américain offre aux compagnies canadiennes les droits de fabriquer sous licence un désinfectant pour lentilles cornéennes souples, pour lequel une demande de brevet a déjà été déposée aux États-Unis. Les désinfectants chimiques courants utilisables à la température ambiante qui sont acceptés par les organismes de réglementation contiennent deux produits organiques, soit la chlorhexidine qui est un composé cationique à base d'azote et le thimérasol qui est un composé du mercure. Ces deux produits présentent plusieurs inconvénients. Par exemple, la chlorhexidine est adsorbée sur la lentille, traverse ensuite celle-ci, puis est adsorbée sur le tissu oculaire, causant ainsi une irritation. Le nouveau désinfectant con-

send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020, U.S.A.

### **Roof-Framing System/302**

British inventor offers the Canadian manufacturing and marketing rights to his three dimensional structural roof framing system. The system consists of welded steel modules which can be prefabricated, transported easily and rapidly erected on site by non-specialist workers. Site connections are bolted. The whole roof support frame can be constructed from only three basic modules. The system eliminates the use of conventional diagonal braces permitting easier installation of services, ductwork, crawlways, etc. The frame design offers more economical use of steel and lower manufacturing and erection costs. (See illustration page 37.) Write: M.L. Kubik and Son, Consulting Engineers, "Nadolnik", 17 Birchwood Drive, Ravenshead, Nottinghamshire, NG15 9EE England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London, W1X 0AB England.

### **Elevator Control Adapter/302**

American company offers the exclusive Canadian manufacturing and marketing rights, with the possibility of future sub-licensing rights to British Commonwealth countries, of its patented passenger elevator control adapters to meet the needs of handicapped persons. These adapters provide dual elevator control, the second set lowered to be accessible to persons in wheel chairs. It is claimed that the mechanical system is inexpensive; requires no structural change; is capable of being quickly installed; prime initial customers will be colleges, government buildings, and hospitals; and that the system works on both hall stations and cab controls. (See illustration page 37.) Write: Mr. G. Haukebo, Vice President, Johnbo Nordic, Inc., 1320 6th Avenue South, Moorhead, Minnesota 56560 and send a copy of your initial correspondence to Canadian Consulate, 15 South Fifth Street, Minneapolis, Minnesota 55402, U.S.A.

### **Grinding Machine for Arcuate Shaped Blades/302**

American inventor offers the Canadian manufacturing and worldwide marketing rights, under a sale or licensing arrangement, for the production of his patented grinding machine for arcuate shaped blades. It is claimed that this grinding machine will sharpen all types of knives including curved, straight, double angle, double bevel and double edged. Write: Mr. Charles G. Harris, 801 Southwest Street, Culpeper, Virginia 22701 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

tient des substances différentes qui éliminent ces inconvénients. Ces substances sont présentement disponibles à bas prix. Écrire à: D<sup>r</sup> Murray Jelling, 21 Spring Hill Road, Roslyn Heights, New York 11577 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 1251 Avenue of the Americas, New York City, N.Y. 10020 (É.-U.).

### **Ossatures de toit/302**

Un inventeur britannique offre les droits de fabrication et de commercialisation au Canada de son système d'ossature de toit en trois dimensions. Il s'agit de modules d'acier soudé qui peuvent être préfabriqués, aisément transportés et rapidement montés à pied d'oeuvre par des ouvriers non spécialisés. Le montage est boulonné, et n'importe quelle ossature peut être réalisée à partir de trois modules fondamentaux. Grâce à cet agencement, on évite de contreventer, ce qui simplifie la pose des câbles, des gaines, etc. La nouvelle conception permet un usage plus rationnel de l'acier ainsi qu'une réduction des frais de fabrication et de montage. (Voir l'illustration page 37.) Écrire à: M.L. Kubik and Son, Consulting Engineers, "Nadolnik", 17 Birchwood Drive, Ravenshead, Nottinghamshire, NG15 9EE (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).

### **Adaptateur pour commandes d'ascenseur/302**

Une société américaine offre les droits exclusifs, pour le Canada, de fabrication et de commercialisation, avec possibilité d'acquisition ultérieure de sous-licences pour les pays du Commonwealth britannique, de ses adaptateurs de commandes d'ascenseur brevetés pour répondre aux besoins des personnes handicapées. Ces adaptateurs fournissent des commandes doubles, le deuxième jeu de commandes étant abaissé pour être à la portée des personnes assises dans un fauteuil roulant. Le fabricant affirme que le système mécanique est économique, qu'il n'exige aucune modification de l'ascenseur, que son installation est rapide, que le marché initial principal comprend les collèges, immeubles gouvernementaux et hôpitaux et enfin que le système est adaptable autant aux commandes d'étages qu'aux commandes de l'intérieur de l'ascenseur. (Voir l'illustration page 37.) Écrire à: M. G. Haukebo, Vice Président, Johnbo Nordic, Inc., 1320 6th Avenue South, Moorhead, Minnesota 56560 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 15 South Fifth Street, Minneapolis, Minnesota 55402 (É.-U.).

### **Machine à affûter les lames arquées/302**

Un inventeur américain offre les droits canadiens de fabrication et les droits de commercialisation pour le monde entier, moyennant l'achat du brevet ou d'une licence, pour la fabrication de sa machine brevetée à affûter les lames arquées. On prétend que cette machine permet d'affûter tous les types de lames incluant les lames courbées, droites, à deux angles à double biseau et à deux tranchants. Écrire à: M. Charles G. Harris, 801 Southwest Street, Culpeper, Virginia 22701 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 3 Parkway Building, Suite 1310, Philadelphie, Pennsylvanie 19102 (É.-U.).

### Saunas/302

Danish company offers the Canadian manufacturing and distributing rights to its line of saunas. Canadian licensee, who, preferably, should be in the woodworking industry, would be given (1) fully finished set of specified drawings; (2) turnkey flow-charts to establish assembly line production of saunas and (3) a Canadian market analysis and feasibility study including estimated annual sales figures. (See illustration page 37.) Write: ERA Sauna ApS, Poppelgaadsvej 6-8, DK-286 Søborg, Denmark and send a copy of your initial correspondence to the Commercial Division, Canadian Embassy, Kr. Bernikowsgade 1, 1105 Copenhagen K, Denmark.

### Solar Heating Equipment/302

Australian inventor offers for sale on an unrestricted basis his provisionally patented new concept in solar heating equipment. It is claimed that this invention is capable of collecting and directing similar amounts of heat commensurate to a helio/tower operation, with a finite focus commensurate to a parabolic lens operation. The system can be used to separate hydrogen from water as well as producing steam. Write: Mr. A. Miller, P.O. Box 108, Maroochydore, Queensland 4558, Australia and send a copy of your initial correspondence to Canadian Consulate General, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, New South Wales 2000, Australia.

### Random Timer for Burglars/302

American company offers the Canadian manufacturing and distribution rights to a patented consumer security timer device which was first introduced to the U.S. market in 1980. This timer is used to turn lights, radios, etc., on and off at unpredictable random intervals of 10 to 25 minutes. This creates the impression of continuing activities to baffle potential burglars. The American company will furnish drawings, technical know-how, and pre-assembled internal mechanisms to interested Canadian companies. Write: Mosaic Enterprises, Inc., P.O. Box 3786, Washington, D.C. 20007 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

### Heatmiser® Heat Pump/302

United Kingdom manufacturer offers the Canadian manufacturing and marketing rights, with the possibility at a later stage of U.S. marketing rights, for a fuel-saving swimming pool and domestic hot water heating system. The unit is a heat pump that transmits heat from the air to maintain the desired water temperature. It is claimed that this process results in 20 to 33 per cent savings in fuel costs compared to oil-fired boilers or gas heaters. The electrically-powered fiberglass enclosed unit uses an R22 refrigerant and has a stainless steel, foam-insulated heat exchanger. (See illustration page 37.) Write: Pennine Pools Ltd., Oak

### Saunas/302

Une compagnie danoise offre les droits de fabrication et de distribution pour sa gamme de saunas. Le titulaire de la licence, qui oeuvrera de préférence dans le secteur du bois d'oeuvre, recevra 1) un jeu complet des dessins du cahier des charges; 2) des diagrammes couvrant toutes les opérations d'établissement de la chaîne de montage des saunas et 3) une analyse du marché canadien et une étude de faisabilité, notamment l'estimation des ventes annuelles. (Voir l'illustration page 37.) Écrire à: ERA Sauna ApS, Poppelgaadsvej 6-8, DK-286 Søborg, Danemark et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Kr. Bernikowsgade 1, 1105 Copenhague K, Danemark.

### Matériel de chauffage solaire/302

Un inventeur australien vend sans restriction sa nouvelle conception, provisoirement brevetée, d'un matériel de chauffage solaire. Il semble que cette invention puisse permettre de capter et de diriger une quantité de chaleur comparable à celle d'un pylône héliothermique, avec un foyer de concentration fixe comparable à celui d'une installation à miroir parabolique. Le système peut être utilisé pour séparer l'hydrogène de l'eau et pour produire de la vapeur. Écrire à: M. A. Miller, P.O. Box 108, Maroochydore, Queensland 4558 (Australie) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, New South Wales 2000 (Australie).

### Minuterie à fonctionnement aléatoire contre le cambriolage/302

Une compagnie américaine offre les droits de fabrication et de distribution au Canada d'une minuterie brevetée, lancée sur le marché américain en 1980. Cette minuterie permet d'allumer et d'éteindre lumières, radios, etc., à des intervalles totalement aléatoires variant de 10 à 25 minutes. Grâce à un tel dispositif, les cambrioleurs éventuels ont l'impression d'une activité dans la maison. La compagnie américaine fournira les plans, le know-how technique et les mécanismes internes pré-assemblés aux compagnies canadiennes intéressées. Écrire à: Mosaic Enterprises, Inc., P.O. Box 3786, Washington, D.C. 20007 et faire parvenir une copie de votre correspondance initiale au Consulat du Canada, 3 Parkway Building, Suite 1310, Philadelphie, Pennsylvanie 19102 (É.-U.).

### Pompe à chaleur Heatmiser® /302

Un fabricant du Royaume-Uni offre les droits canadiens de fabrication et de commercialisation, avec possibilité d'acquisition ultérieure des droits de commercialisation aux États-Unis, d'un système de chauffage de l'eau domestique et d'une piscine utilisant peu de combustible. Il s'agit d'une pompe à chaleur qui transmet la chaleur de l'air pour maintenir l'eau à la température désirée. Le fabricant affirme que son système permet des économies de combustible de 20 à 33 pour-cent par rapport aux chaudières à l'huile ou aux systèmes utilisant le gaz naturel. L'appareil, qui est revêtu de fibre de verre et fonctionne à l'électricité,

Mill, Dunnockshaw, Burnley, Lancashire, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

### **Water Bed Mattresses/302**

American manufacturer seeks a Canadian joint venture arrangement to assemble water bed mattresses in Canada using radio frequency heat sealers. Potential partners could include current manufacturers of swimming pools, shower curtains and other heat sealers of plastic products. Companies must have radio frequency heat sealers from 1 KW to 10 KW. American manufacturer will provide technical know-how and financial assistance during start up of operation. Write: Land and Sky Manufacturing Co., 5001 S 16th Street, Lincoln, Nebraska 68502 and send a copy of your initial correspondence to Consul and Senior Trade Commissioner, Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

### **Wiping Cloths/302**

Hungarian State trading agency offers a licensing agreement in Canada for the production of synthetic textile wipers of excellent absorbency which are manufactured from reprocessed synthetic textile waste using a simple chemical treatment performed during the normal washing stage of wiping cloth production. The treatment uses chemicals that are commercially available and provides water and oil absorbency equivalent to that of natural fibre wipers. The process is applicable to any existing washing machines and adaptable to traditional selection-cutting-washing-drying sequence of wiping cloth production. Write: Novex 6021, Novex Foreign Trade Co. Ltd. for Development and Commercialization of Inventions, Marcius 15, ter 1, 1056 Budapest, Hungary and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Budakeszi ut 55/dP/8, 1021 Budapest, Hungary.

utilise un réfrigérant de type R22 et est doté d'un échangeur de chaleur en acier inoxydable isolé avec de la mousse. (Voir l'illustration page 37.) Écrire à: Pennine Pools Ltd., Oak Mill, Dunnockshaw, Burnley, Lancashire, England et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-commissariat du Canada, 1 Grosvenor Square, Londres, W1X 0AB (Angleterre).

### **Matelas de lits d'eau/302**

Un fabricant américain voudrait s'associer à une entreprise canadienne pour l'assemblage de matelas de lits d'eau au moyen de dispositifs à sceller par chauffage haute fréquence. Les entreprises qui fabriquent actuellement des piscines, des rideaux de douche et autres produits en plastique assemblés par chauffage pourraient être des associés éventuels. Les entreprises doivent disposer de dispositifs à sceller par chauffage haute fréquence de 1 à 10 kW. Le fabricant américain fournira, le savoir-faire technique et une aide financière pendant la phase de démarrage. Écrire à: Land and Sky Manufacturing Co., 5001 S 16th Street, Lincoln, Nebraska 68502 et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 310 South Michigan Avenue, 12e étage, Chicago, Illinois 60604 (É.-U.).

### **Essuie-tout/302**

L'agence gouvernementale de commerce hongroise offre au Canada un accord de fabrication sous licence d'essuie-tout en textile synthétique d'un excellent pouvoir absorbant et qui sont fabriqués à partir de résidus de textiles synthétiques soumis à un traitement chimique simple pendant l'étape normale du lavage lors de la fabrication des essuie-tout. Le traitement fait intervenir des produits chimiques disponibles dans le commerce et permet d'obtenir un produit d'un pouvoir absorbant équivalent, pour l'huile et pour l'eau, à celui des essuie-tout en fibres naturelles. Le procédé est applicable dans tous les appareils à laver existants et adaptable à la séquence classique sélection-coupe-lavage-séchage de la fabrication d'essuie-tout. Écrire à: Novex 6021, Société de commerce extérieur Novex pour le développement et la commercialisation des inventions, Marcius 15, ter 1, 1056 Budapest (Hongrie) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, Budakeszi ut/55/dP/8, 1021 Budapest (Hongrie).

**Canadian Patents Available for  
Licensing or Sale Issued  
January 1981**

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

**Note:**

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

**Note:**

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

**Patent 1,092,816**

**Truncated Icosahedral Blocks/302**

Truncated icosahedral blocks are designed to meet one another along their truncation surfaces, thus imitating an icosahedron's unique ability for three-dimensional intersection with another icosahedron, so that a line segment that defines the base of a pentangular pyramid on one icosahedron also defines the base of a pentangular pyra-

**Brevet 1,092,816**

**Icosaèdres tronqués/302**

mid on the other icosahedron. Write: John P. Hogan, 600 Elm Street, Williamsburg, Iowa 52361 and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

**Patent 1,092,904**

**Process of Forming a Metal or Metal  
Compound Coating on a Face of a Glass  
Substrate and Apparatus Suitable for Use  
in Forming Such Coating/302**

A process of forming a metal or metal compound coating on a face of a glass substrate by contacting such face while at elevated temperature with droplets comprising a metal compound which by pyrolysis forms the coating metal or metal compound on the face, the improvement which comprises the steps of discharging at least one stream of the droplets at an inclination to the face so as to impinge on a zone within the face area to be coated, effecting a relative displacement between the stream and substrate so that the instantaneous zone of impingement of the stream on the face is progressively displaced along the

**Brevet 1,092,904**

**Procédé et appareil de métallisation du  
verre/302**

face area to be coated, and creating suction forces in exhaust ducting whose entrance is located directly downstream from the impingement zone so as to cause gases environmental to the stream to flow continuously in the downstream direction away from the stream and from the vicinity of the impingement zone and directly into the ducting substantially without affecting the paths of the droplets toward the zone. 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.

**Patent 1,092,953**

**Portable Work Support Assembly/302**

A portable kit which can be quickly and easily set up so to operate either as a circular saw, a table saw, jig saw or wood shaper; the kit including a portable case for being carried in a hand, and containing a collapsed table, a wood and a metal table top for placement on the table, a set of power tools comprising a circular saw, a jig saw, and a router for selectively being mounted on one of the table

**Brevet 1,092,953**

**Ensemble portatif d'outils mécaniques  
avec table de travail/302**

tops so as to perform more precise machining of wood than is possible with a hand held tool. Write: Robert Brenta, c/o Richard L. Miller, 3612 Woolworth Building, 233 Broadway Avenue, New York, N.Y. 10007 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020, U.S.A.

**Patent 1,092,983****Wind Rotor Automatic Air Brake/302**

A spring-loaded pivoting end plate that is hinged such that it is deployed by centrifugal force into the airstream to thereby act as an aerodynamic brake for wind turbines in overspeed conditions. The brake has a stationary portion fixed on the tip of the turbine rotor and a pivoting portion hinged for movement with respect to the fixed portion. The longitudinal centerline of the brake coincides with the chord line of the turbine blade and the pivoting movement is about a hinge axis that is normal to the rotational plane of the turbine. The planform of the brake has a low aspect

**Brevet 1,092,983****No translation available/302**

ratio shape with the ratio of the fore and aft chordwise length to the width being one or greater. The edges of the brake in the normal running condition extend beyond the contour of the turbine blade to serve as an end plate such that the aerodynamic efficiency of the blade is improved thereby. Write: Grumman Corporation, South Oyster Bay Road, Bethpage, N.Y. 11714 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020, U.S.A.

**Patent 1,092,988****Audio Console System for Home and Vehicle/302**

An audio console system for use in a vehicle and a home and which comprises an audio console unit removably securable at the roof of a vehicle in replacement of the dome light and which is also usable in the home in combination with other components to form a home music system of the stereo type. This audio console unit is removably fixed by a pair of brackets at the roof of the vehicle cabin, forms a recess for a cassette player or other sound reproducing apparatus and has the necessary plugging devices to readily connect the audio console unit and the cassette player for energization of the latter by the wiring otherwise providing the D.C. power supply to the dome

**Brevet 1,092,988****No translation available/302**

light now replaced by this audio console unit. The other system components include a home mounting base on which the audio console unit is operatively mounted in the home, and a pair of stereo speaker units connected to the home mounting base and each carrying a particular music playing apparatus to form an integrated stereo music system. Write: Louis Hypolite, 5816 Auclair Street, Brossard, Québec J4Z 1J9 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,093,020****Shelf/302**

This invention provides a shelf having an upper substantially horizontal surface and a depending inclined support or brace integral with the upper surface and forming an acute angle therewith. The upper surface is provided with means such as pins, or alternately, a resilient material with a high co-efficient of friction, which means are adapted to be releasably engageable with a primary supporting surface. The inclined support is of such a length so as to engage with a secondary vertical surface beneath the primary supporting surface thus mounting the upper surface of the shelf in an operable, horizontal position. In a

**Brevet 1,093,020****Tablette/302**

further embodiment of the invention, the shelf includes an additional member having a first surface which constitutes the primary supporting surface, and a second surface provided with means such as an adhesive material which means facilitates releasable attachment to the secondary, vertical supporting surface. Write: John Sefton, 81 Flamingo Crescent, Regina, Saskatchewan S4S 4L6 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,093,154****Automotive Ignition System Simulator and Waveform Generator/302**

This automotive ignition system simulator and waveform generator has a distributor in which the igniter arc discharge can be viewed. The rotation of the rotor, in the distributor, is regulated by a solid state motor speed controller. Oscilloscope waveform deviations are accomplished by means of electronic control, not faulty ignition component replacement. Combined with an ignition oscilloscope and related test instruments, this present simu-

**Brevet 1,093,154****Simulateur de système d'allumage, et générateur de formes d'onde/302**

lator provides a comprehensive means of analyzing ignition waveforms as well as a teaching aid for ignition system theory. Write: Donald G. Boychuk, 1243 East, 12th Avenue, Vancouver, B.C. V5T 2J8 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,093,200****Acoustic Emission System for Welding  
Flaw Detection/302**

A system for flaw detection during a continuous welding process using a transducer to provide a signal burst for each acoustic burst from an article being welded. The signal burst is amplified and filtered to pass frequencies between about 100 and about 550 KHz. The ring-down counter counts signals of the filtered signal burst. The first signal of the filtered signal burst initiates a timing circuit that times out to provide a reset pulse to reset the ring-down counter. If the decimal count exceeds 100 but does not exceed 1000, the ring-down counter operates circuitry to provide a latched signal to an output of a flip-flop to enable a gate before the counter is reset by the reset pulse of the timing circuit. That reset pulse is also provided to the gate to provide at its output a pulse representing one

**Brevet 1,093,200****Émetteur acoustique pour la détection  
des défauts des soudures/302**

filtered signal burst having more than 100 and no more than 1000 signals during the timing operation. The pulses from the gate are inputs to a pulse counter in the counter mode and a retriggerable monostable multivibrator that, if not retriggered by the next pulse before a predetermined time, resets another flip-flop and resets the pulse counter. If the pulse counter counts a predetermined number of pulses before it is reset, it sets that another flip-flop to provide a signal to an alarm device that turns on a light indicating that there is a weld flaw. Write: Gard, Inc., 7449 N. Natchez Avenue, Niles, Illinois and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

**Patent 1,093,323****Method and Means for Protecting a Sea  
Bottom Surface and an Installation on  
Same/302**

A means and a method for protecting a sea bottom surface or an installation positioned on same, for instance a pipeline, which means comprises a plurality of pliable concrete plate elements which are flexibly interconnected one after the other and thereby forming a chain-like unit, which chain-like unit is positioned along the sea bottom surface, its flexible characteristics both longitudinally and trans-

**Brevet 1,093,323****Appareil et méthode de protection d'une  
surface au fond de la mer, et installation  
et mise en place/302**

versally enabling the unit to adapt itself to transverse and to longitudinal level variations in the course of the laying. Write: F. Selmer A/S, Innspurten 5, Oslo 6, Norway; A/S Hoyer Ellefsen, Bygdoy Allé 1, Oslo 2, Norway; Thor Furuholmen A/S, Karl Johansgate 39, Oslo 1, Norway and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Posttuttak, Oslo 1, Norway.

**Patent 1,093,373****Ventilation Diffuser/302**

A ventilation diffuser of the type used as a ceiling ventilation outlet and characterized by its adjustability to produce the desired flow output, to produce the desired directional flow pattern around it, to rooms of different sizes and to different positions relative to the inside walls of a building, and to ventilation outlet ducts of different sizes. This ventilation diffuser comprises a receptacle including a bottom and an open end opposite the bottom, a ventilation deflector adjustably displaceable in in-and-out direction in the open end and curved to produce an outward flow parallel to and against the ceiling, frictionally engaged

**Brevet 1,093,373****Diffuseur d'air/302**

male and female connection members to readily adjust the ventilation deflector relative to the receptacle and thus the ventilation output, a gate device having selectively tearable tabs regulating the ventilation output to selectively define a desired directional flow pattern around the diffuser, and clips to snappingly secure the diffuser in an aperture of the ceiling. Write: Michel Roy, 856 du Parc, Duvernay (Laval), Québec H7E 2T6 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Brevet 1,093,428****Dispositif de manoeuvre par levier pour  
les commandes de climatisation d'un  
véhicule/302**

Dispositif de manoeuvre par levier pour les commandes de climatisation d'un véhicule. Ce dispositif comporte un levier de manoeuvre unique articulé sur une platine entre deux biellettes pour l'accrochage des câbles de commande. Chaque biellette est articulée sur la platine par un axe fixe servant successivement de pivot au levier au cours de son déplacement et sur le levier par un axe mobile rendu provisoirement fixe lorsque la biellette entraînée arrive en

**Patent 1,093,428****Lever for Actuating Air Conditioning  
Controls in Vehicles/302**

butée contre la platine. En butée, l'axe mobile d'une biellette se superpose avec l'axe fixe de l'autre biellette pour constituer le nouveau pivot. Écrire: Régie Nationale des Usines Renault, 8/10, avenue Emile Zola, 92190 Boulogne, Billancourt, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Patent 1,093,517****Box Fans/302**

A box fan comprising a box-like structure containing an electric motor and a fan blade assembly operable by the motor, which structure consists of a front section and a rear section forming a box having front and rear openings which are interconnected to form a duct through said box, the fan blade assembly being positioned for causing air flow through the duct when the motor is operating, wherein the two sections are held securely together by a locking

**Brevet 1,093,517****Ventilateur sous boîtier/302**

means including external resiliently operable disguised clamps which are disposed transversely of the interface between said sections. Write: Allware Agencies Limited, C/O Whinney Murray & Co., 57 Chiswell Street, London, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB England.

**Patent 1,093,523****Lamp Assembly for Helmets, Hard Hats and the Like/302**

In one embodiment, a battery case and lamp assembly detachably engage with a pair of clips secured to the front of the helmet. In the preferred embodiment a lower horizontal rod attached to the back of the battery case clips into a pair of clips secured to the front of the helmet and a pair of resilient claws at the top of the battery casing, detachably engage any one of a plurality of projecting teeth, also secured to the front of the helmet. The case and lamp assembly pivot around the horizontal rod so that the

**Brevet 1,093,523****No translation available/302**

angle of the lamp assembly can be adjusted to suit the user. Switch means are provided for the lamp assembly to connect and disconnect same from the batteries within the battery case. Write: Rodney H. Isfeld, Box 69, Gimli, Manitoba R0C 1B0 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,093,546****Perfluoroalkylether Substituted Phosphines and Lubricant Composition/302**

A lubricant composition comprising (1) a base fluid having the following formula:  $R_fO(CF_2CF_2O)_m(CF_2O)_nR_f$ , wherein  $R_f$  is a perfluoroalkyl group, m and n are integers whose sum is between 2 and 200 and the ratio n to m is between 0.1 and 10; and (2) a minor amount of a perfluoroalkylether

**Brevet 1,093,546****Phosphines à substitution par des perfluoroalkyléthers, et substances lubrifiantes/302**

substituted aryl phosphine. Write: U.S. Department of Commerce, Assistant General Counsel for Patents, Washington, D.C. 20230 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

**Patent 1,093,552****Highly Absorbent Polymeric Compositions Derived from Flour/302**

Absorbent polymeric compositions are prepared by graft polymerizing acrylonitrile onto flour or other starch-containing substrates and then subjecting the flour-polyacrylonitrile graft copolymers to alkaline saponification. Compositions prepared from gelatinized flour absorb from 1800-3000 times their weight of deionized water. Write: U.S.

**Brevet 1,093,552****Substances polymériques dérivées de la farine, à coefficient d'absorption très élevé/302**

Department of Commerce, Assistant General Counsel for Patents, Washington, D.C. 20230 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19101, U.S.A.

**Patent 1,093,595****Shingle Packaging System/302**

This invention is an automatic shingle packer that performs the operations of sorting, selection, layering and packaging in a continuous manner. The selection of the shingles which have been separated according to width is by computer. Sensors on the shingle storage bins signal

**Brevet 1,093,595****Système de conditionnement de bardeaux/302**

the presence or absence of shingles to the computer thus affecting the selection program and permitting alternative selections. Conveyors feed the shingles, layer by layer, into a final assembly apparatus. A rotatable bin, as part of this apparatus, receives a layer of shingles from a series of

pickup wheels and rotates 180° before the next layer is deposited. This provides the opposed directions of adjacent layers. When sufficient layers have been built up, the bundle is strapped and ejected from the rotatable bin. Write: Fred H. Muth, 23985 Loughheed Highway, Albion,

B.C. V0M 1B0 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Brevet 1,093,596**

**Dispositif d'effeuillage dans une machine distributrice de feuilles une à une/302**

Dispositif d'effeuillage dans une machine distributrice de feuilles une à une comportant un plateau élévateur sur lequel repose une pile de feuilles caractérisé en ce qu'il comprend un levier comportant un premier bras et un deuxième bras et un axe d'articulation fixe, solidaire du bâti de la machine, autour duquel il peut tourner, une petite lamelle mince et souple étant fixée à l'extrémité du premier bras du levier et reposant sur le dessus de la pile de feuilles, un ressort prenant appui contre le deuxième

**Patent 1,093,596**

**Pick-Off Device for Separate Sheet Distributing Machine/302**

bras du levier au voisinage de l'axe d'articulation, la compression du ressort étant obtenue au moyen d'une vis de réglage. L'invention s'applique en particulier aux machines distributrices de billets de banque. Écrire: Transac — Compagnie pour le Développement des Transactions Automatiques, 29, rue Emeriau, 75015 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Patent 1,093,609**

**Modular Concept in Camper Trailer Having Portable Corridor/302**

A concept in camper trailers wherein a plurality of individual camper trailer units may be enjoined together when parked in a trailer camp so to form a dwelling of more variable floor plan shape; each camper trailer having a side door and a rear opening which are variable connected between the units by means of a portable corridor attachable

**Brevet 1,093,609**

**Concept modulaire de caravanes équipées de passages mobiles/302**

therebetween. Write: Ewen M. Maclean, c/o George Spector, 3615 Woolworth Building, 233 Broadway Avenue, New York City, New York 10007 and send a copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020, U.S.A.

**Patent 1,093,858**

**Fibre Optic Cable Signal Detector and Fault Locator/302**

Based on the spectrophone principle, an acoustic transducer may be mounted on a fibre optic cable to detect modulated light messages being transmitted along the cable. The same device may also be used as a movable indicator to precisely locate and identify fibre structural discontinuities, bends and ruptures in a simple manner.

**Brevet 1,093,858**

**Détecteur de signaux et localisateur de dérangements pour câble de fibres optiques/302**

Write: James A. Burt, 19 Delair Crescent, Thornhill, Ontario L3T 2M3; Dimitrios Efthimiadis, 3400 Keele Street, Apt. 506, Downsview, Ontario M3J 1L7 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,093,863**

**Speed Ratio Change Mechanism/302**

A gear train transmits power to a higher angular speed. A drive pinion has a spur gear design for meshing with a spur toothed portion of an intermediate gear. The intermediate gear also has a helical toothed portion following a path which axially moves toward and away from the circular path of the spur gear portion engaging the pinion gear. A

**Brevet 1,093,863**

**Mécanisme de changement de vitesses/302**

third gear having the same diameter as the pinion gear is adapted to mesh with the helical gear portion of the intermediate gear. Write: Fred F. Haefner, R.D. 4, Wexford, Pennsylvania 15090 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113, U.S.A.

**Brevet 1,093,872****Barrette de connexion pour fibres optiques/302**

Barrette de connexion entre fibres optiques caractérisée en ce qu'elle comporte un support d'alignement cylindrique portant une rainure disposée selon l'une de ses génératrices pour recevoir les extrémités des fibres respectives, et une bague montée autour du support, fendue longitudinalement pour l'insertion des fibres et mobile en rotation pour leur maintien dans la rainure. Cette barrette

**Patent 1,093,872****Optical Fiber Connector/302**

permet la constitution d'une liaison de transmission d'informations par fibres optiques. Écrire: Compagnie Industrielle des Télécommunications CIT-Alcatel, 12, rue de la Baume, 75008 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Patent 1,093,949****Invalid Walker/302**

An invalid walker is disclosed. The walker comprises a pair of side frames each including two vertical legs joined by transverse members, an X-shaped frame comprising two cross-members pivotally connected to each other and joining the side frames at the front of the walker, with the upper ends of the cross-members being pivotally mounted on the upper ends of the legs and the lower ends of said cross-members being slidably mounted on the lower ends of the legs for permitting folding of the walker, a removable

**Brevet 1,093,949****No translation available/302**

seat assembly which may be mounted on the side frames at the rear of the walker after entrance of the invalid into the walker, and means at the side frames at the front of the walker for maintaining the side frames apart during use. Write: Stanislas Leclerc, 625 Rouleau Street, Apt. 3, St. Hyacinthe, Quebec J2S 1B6 and send a copy of your initial correspondence to Licensing Opportunities Section, (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,094,016****Conductor Arrangement for Compensating for Horizontal Magnetic Fields in Pots Containing a Molten Electrolytic Bath/302**

Arrangement for compensating detrimental magnetic horizontal fields at the plus or upstream end of longitudinally oriented pots in plants for melt-electrolytic production of aluminium, in particular where compensation for vertical magnetic influence from one pot row to another is provided for by utilizing an anode current supply to the minus or downstream end of each pot. A smaller proportion of the current supply to the minus end of the pot takes place

**Brevet 1,094,016****Arrangement de conducteurs électriques pour compenser les champs magnétiques horizontaux des pots à bain électrolytique en fusion/302**

through one or more conductors being located underneath the pot in the longitudinal direction thereof, said smaller proportion of the current supply being preferably no more than 20% of the total anode current supply. Write: Ardal og Sunndal Verk a.s., Sorkedalsveien 6, Oslo 3, Norway and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Posttuttak, Oslo 1, Norway.

**Brevet 1,094,145****Barrette d'impression d'une image/302**

Barrette multistylets d'impression d'une image, comportant un premier réseau de rubans conducteurs, isolés les uns des autres et dont une extrémité de chacun d'eux forment un stylet d'impression et n matrices diagonales d'adressage des stylets dont les colonnes sont formées par les rubans conducteurs de ce premier réseau et sont alimentées à travers des résistances en contact électrique avec les rubans dudit premier réseau, et dont les lignes communes aux n matrices sont formées par des rubans

**Patent 1,094,145****Pas de traduction disponible/302**

conducteurs d'un deuxième réseau et sont reliées aux colonnes à travers des diodes montées sur les lignes ou les colonnes. Application aux installations de transmission de fac-similés. Écrire: Compagnie Industrielle des Télécommunications Cit-Alcatel, 12, rue de la Baume, 75008 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Brevet 1,094,146****Barrette d'impression d'une image/302**

Barrette d'impression d'une image, comportant un empilement de plaquettes conductrices et isolées les unes des autres dont une extrémité de chacune forme un stylet d'impression et n matrices diagonales d'adressage des stylets dont les colonnes sont constituées par les plaquettes et sont alimentées à travers des résistances formées sur les plaquettes et dont les lignes communes aux n matrices sont constituées par des conducteurs électriques reliés

**Patent 1,094,146****Pas de traduction disponible/302**

aux colonnes à travers des diodes également formées sur les plaquettes. Application aux installations de transmission de fac-similés. Écrire: Compagnie Industrielle des Télécommunications Cit-Alcatel, 12, rue de la Baume, 75008 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Patent 1,094,193****Vehicle Upset Warning Device/302**

A Vehicle Upset Warning Device, whose electricity conductive components cause a horn to sound and/or light to glow when vehicle is at a dangerous tilt for a predetermined length of time. The device switch connected to a regulated positive electrical source, is a ball jointed conducting pendulum that strikes the flat side of one of four, flat, curved (curved on the edge), conducting strips. The arc and length of the flat, curved strips are dependant on the length of the pendulum, and the angle from vertical of the adjacent strips. Two curved strips of like size are placed parallel to the longitudinal vehicle axis and at an angle from vertical, less than that required to laterally upset the

**Brevet 1,094,193****No translation available/302**

vehicle. The remaining two curved strips are placed perpendicular to the longitudinal vehicle axis and at an angle from vertical less than the angle required to upset the vehicle longitudinally. The four conducting curved strips are connected to a short time delay relay which is connected to a horn and/or warning light. The system, except for the horn and/or warning light, is enclosed. Write: Robert N.S. Griss, 7432 Fabre Street, Montreal, Québec H2E 2B5 and send a copy of your initial correspondence to Licensing Opportunities Section (34/3), Business Centre, Department of Industry, Trade and Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,094,209****System for Monitoring the Operational Ability of Data Processing Equipment/302**

Data processing equipment suitable for recording details of manually connected telephone calls has a plurality of operator stations with keyboards and visible display units (VDU's) connected in groups to operator's control units which respond to keyed instructions to obtain data from peripheral units storing such data and for recording on magnetic tape cartridges the details of the calls. The control units and peripheral units each include micro-processors for controlling their functions and are arranged to execute tests to determine the operational states of the units and produce signals indicating those states. A monitor unit is connected to all of the units to receive signals indicating the operational states of the units. Each unit may include a watch-dog timer having a counter which is

**Brevet 1,094,209****Système de contrôle de l'état opérationnel d'un matériel de traitement de données/302**

regularly incremented and periodically reset to zero in response to a software instruction so that if a central processing unit gets into a software loop the counter exceeds a threshold value and produces a signal indicating the presence of such a loop. The watch-dog timer may be used to reset the central processing unit to a datum position, erasing all data recorded up to the time as a result of programme execution. A diagnostic unit may be provided enabling an engineer to try out test routines on the units to ensure their correct functioning. Write: The Post Office, 23 Howland Street, London W1P 6HQ, England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

**Brevet 1,094,213****Ensemble de liaison d'une carte-support de circuit électrique et d'un cadre extérieur/302**

Ensemble de liaison d'une carte-support de circuit électrique et d'un cadre extérieur comportant entre chaque bord intérieur du cadre et le bord en regard de la carte, un peigne à dents inclinées dont la partie non dentée est fixée sur le bord intérieur du cadre et dont les extrémités des dents sont fixées sur la carte, au voisinage de son bord, par soudure. L'invention s'applique notamment, sur des

**Patent 1,094,213****Pas de traduction disponible/302**

liaisons téléphoniques, à la fixation mécanique de la carte de l'organe amplificateur d'un répéteur. Écrire: Compagnie Industrielle des Télécommunications Cit-Alcatel, 12, rue de la Baume, 75008 Paris, France et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Ambassade du Canada, 35, avenue Montaigne, 75008 Paris, France.

**Patent 1,094,272****Method and Apparatus for Producing Atomized Metal Powder/302**

A method of producing metal powder by atomizing molten metals to give powder with extremely low oxygen contents comprises providing a substantially closed granulation chamber, providing a reducing liquid in the lower part of said chamber and a reducing gaseous atmosphere above said reducing liquid, melting the metal of which the powder is to be formed, producing a casting stream of the molten metal in the reducing gaseous atmosphere of said substantially closed vessel, subjecting said stream to

**Brevet 1,094,272****Procédé et appareil de fabrication d'une poudre métallique par atomisation/302**

pressurized atomizing agent to atomize the stream, cooling the metal particles at least partly in said reducing gaseous atmosphere and collecting the resulting powder in the reducing liquid. The metal powder thus obtained advantageously has reduced oxygen content. Write: Larson (Rutger) Konsult AB, Bagarsgatan 2, S-211 25 Malmö, Sweden and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

**Patent 1,094,297****Procedure and Means for Producing a Suspension of a Powdery Substance and a Reaction Gas/302**

A suspension of a powdery substance and a reaction gas is formed by allowing the powdery substance to fall as an annular flow into a reaction space, feeding the reaction gas downwardly to encircle the annular flow of powdery substance, the kinetic energy of the annular flow of descending powdery substance being utilized towards its gradual spreading to the sides with the aid of a sliding surface disposed within the reaction space, so that the flow of

**Brevet 1,094,297****Procédé et méthode de production d'une suspension poudreuse en gaz réactif/302**

powdery substance which has been spread to be laterally directed will meet the reaction gas flow substantially at right angles in the reaction space. Write: Outokumpu Oy, P.O. Box 280, SF-00 100 Helsinki 10, Finland and send a copy of your initial correspondence to Commercial Division, Canadian Embassy, Pohjois Esplanadi 25B, 00 100 Helsinki 10, Finland.

**Brevet 1,094,319****Pot pour plante à fond amovible/302**

L'on décrit un pot pour plantes dont le fond est amovible pour faciliter le dépotage. Le fond repose sur une mince bande faisant saillie à l'intérieur du contenant. Cette bande est entrecoupée de deux espaces pour le passage des bouts d'un barreau pivoté en son milieu sous le centre du fond. En tournant le barreau, ces bouts s'engagent sous la

**Patent 1,094,319****Plant Pot with Removable Bottom/302**

bande et bloquent le fond en place. Écrire: Gilles Gingras, 2300-2ème Avenue, Appartement 56, Québec (Québec) G1L 3E3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (34/3), Centre des entreprises, Ministère de l'Industrie et du Commerce, Ottawa, Ontario K1A 0H5.

**Patent 1,094,589****Work Holding Fixture/302**

A work holding fixture for cylindrical workpieces comprising a first member having a flat base and a cylindrical portion upstanding from the base, a horizontal V-groove formed in the upper end of the cylindrical portion, and a pair of clamps having fasteners for fastening to the cylindrical portion, the clamps having cross-bars which span the V-groove for clamping cylindrical workpieces therein, vertical flats formed on opposite sides of the first member including the base and cylindrical portion thereof, the V-groove extending between the flats, the first member capable of being held via any of the three flats thereon for grinding cylindrical workpieces held in the V-groove of the

**Brevet 1,094,589****No translation available/302**

first member, the first member also capable of being bolted via its base for milling cylindrical workpieces held in the V-groove of the first member, and a second member having a hollow cylindrical body which fits over and slides on the cylindrical portion of the first member, and aligned central apertures in the first and second members for carrying out a drilling operation on cylindrical workpieces held in the V-groove of the first member. Write: Andrew Rea, 1051 Naughton Street, Room 202 (Fisher), Troy, Michigan 48084 and send a copy of your initial correspondence to Canadian Consulate, 1920 First Federal Building, 1001 Woodward Avenue, Detroit, Michigan 48226, U.S.A.

**Patent 1,094,625**

**Kitchen Utensil/302**

An electrically heated kitchen utensil has a thermally insulated handle provided with an internal electric heating unit adapted to releasably receive and heat a kitchen device, such as a knife, spoon, scoop, dipper or spatula. The heating unit comprises a pair of spaced parallel electric heating elements defining a channel which receives the shank of the kitchen device. The kitchen device is releasably secured in the channel by interengaged teeth on the shank and a spring biased pivoted member forming the bottom of

**Brevet 1,094,625**

**Ustensiles de cuisine/302**

the channel. The kitchen device is released by a release pushbutton acting on the pivoted member to disengage the teeth. A rheostat is provided to regulate the heat output of the heating elements. Write: Minnie V. Banks, 802 2nd St., S.W., Clarion, Iowa 50525 and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604, U.S.A.

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### PAT-APPL-6-052 656

Improved Tree Rooting Using Synthetic Auxins/302

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed June 27, 1979, by the Department of Agriculture. The

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Auxines synthétiques favorisant l'enracinement des arbres/302

present invention relates to the use of synthetic auxins to initiate adventitious root formation. Write: NTIS.

**PAT-APPL-6-130 634**

**Machine for Planting Containerized Tree and Shrub Seedlings/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed March 14, 1980, by the Department of Agriculture. This invention relates to mechanical planters, and more particularly to an improved automated machine for planting nursery stock such as tree and shrub seedlings. This is

**Machine pour planter des semis d'arbres et d'arbustes placés dans des contenants/302**

especially suited for planting such seedlings on slopes and irregular terrain and performs the required steps automatically without requiring human intervention. Write: NTIS.

**PAT-APPL-6-132 591**

**Steep Slope Seeding Machine/302**

Filed March 21, 1980, by the Department of Agriculture. this invention relates to agricultural equipment, and more particularly to a machine for seeding relatively steep

**Machine pour semer dans les pentes fortes/302**

slopes, such as for reseeding steep roadside slopes which have been denuded during road construction. Write: NTIS.

**PAT-APPL-6-176 234**

**Dietary Supplementation with Essential Metal Picolinates/302**

Filed August 8, 1980, by the Department of Agriculture. The levels of essential metals in the mammalian system can be precisely controlled by administering these metals in the form of exogenously synthesized coordination complexes of picolinic acid. The assimilation of an adequate quantity of physiologically important heavy metals is essential to the health of both humans and animals. Failure of the body to ingest and absorb the necessary amounts of such

**Compléments nutritifs à base de picolines métalliques essentiels/302**

metals can lead to improper functioning of the metabolic processes as well as to a variety of diseases and associated symptoms. For example, anemia is correlated with an iron deficiency. Inadequate amounts of zinc may lead to skin conditions, loss of taste, neuropsychiatric symptoms, and in some animals the development of congenital anomalies and even the suppression of growth. Write: NTIS.

**PAT-APPL-6-176 235**

**Method of Enhancing Activity of Homogeneous Ziegler-Type Copper Catalysts/302**

Filed August 8, 1980, by the Department of Agriculture. In the hydrogenation of a polyunsaturated oil, the activity of a homogeneous Ziegler-type copper catalyst is enhanced by

**Méthode d'amélioration de l'activité de catalyseurs au cuivre homogènes de type Ziegler/302**

the physical presence of an autonomous insoluble material. Write: NTIS.

**PAT-APPL-904 366**

**Null Steering Antenna/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed May 10, 1978, by the Department of the Army. Where there is a difference in the angle of arrival between desired incoming signals and interfering signals, the reception of the desired signals is maximized by the creation of nulls in the direction of the interfering signals. A high quality

**Antenne orientable avec mise à zéro/302**

receiving (or transmitting) beam is formed by a one-time calculation of the proper phase or amplitude adjustment required to create a null in the direction of each interfering signal. The antennae are then appropriately adjusted to establish the nulls. Write: NTIS.

**PAT-APPL-6-047 522**

**Flight Control System/302**

Filed June 11, 1979, by the Department of the Army. A flight control system is provided for a helicopter furnishing safety feature, and providing back up control in the event of failure of controls of the rotary head swashplate of a helicopter. The swashplate is regulated by a series of

**Dispositif de commande en vol/302**

actuators which are angularly positioned at particular settings around the swashplate. In the event of its failure, a supplemental system controls the selected settings for the swashplate, rotary head, and spar root and blade assemblies of the helicopter. Write: NTIS.

## **PAT-APPL-6-048 402**

### **Structural Cores and Their Fabrication/302**

Filed June 14, 1979, by the Department of the Army. Structural cores in the form of open-ended polyhedrons joined together along common edges or sides are generating high industrial interest because of the great strengths they possess relative to their weights. A structural core medium of interwoven fibrous filaments coated with plastic is

### **Noyaux de structure et leur fabrication/302**

highly satisfactory, but it has the disadvantage that it is very difficult, if not heretofore impossible to produce in other than planar, sandwich or cylindrical form. A jig for the fabrication of such cores has not come into existence. This invention provides a jig which makes possible the fabrication of such polyhedral structural cores. Write: NTIS.

## **PAT-APPL-6-054 213**

### **Airborne Hoist/302**

Price per copy from NTIS: PC U.S. \$8.00/MF U.S. \$3.50, filed July 2, 1979, by the Department of the Army. An improved airborne hoist is described for use in lifting a load, particularly by means of a helicopter, comprising a pair of rotatable drums, each drum being rotatable in an opposite direction, a drive unit intergeared through a series of shafts for providing rotation to the drums, a cable holding

### **Treuil aéroporté/302**

device, in the configuration of a supplemental drum surrounding each of the first said drums, and each cable holding device provided for rotating simultaneously in unison with the rotation of its respective drum, while at the same time being axially shiftable for providing a winding or unwinding of its held cable from a constant location. Write: NTIS.

## **PAT-APPL-6-059 020**

### **Visible and Infrared Intensity Limiter/302**

Filed July 19, 1979, by the Department of the Army. The laser light is polarized and sent through an electro-optic pockels cell where it is phased shifted in a duty cycle in accordance with the amplitude intensity. The light is then

### **Limiteur de l'intensité optique et infrarouge/302**

sent through an analyzer which will act as an attenuator to regulate the final amplitude output of the light. Write: NTIS.

## **PAT-APPL-6-060 525**

### **Efficient High Voltage Photovoltaic Cells/302**

Filed July 25, 1979, by the Department of the Army. A photovoltaic cell comprised of a plurality of single crystal, permanently polarized, ferroelectric layers in a stack with electrodes affixed to each end. Additionally, electrodes are disposed between adjacent layers or conductive or semi-

### **Piles photovoltaïques haute tension efficaces/302**

conductive regions are formed at and near the interfaces between layers by chemical reduction or doping. The cell has a higher conversion efficiency than ferroelectric cells heretofore known. Write: NTIS.

## **PAT-APPL-6-064 451**

### **Fluid Oscillator/302**

Filed August 7, 1979, by the Department of the Army. A telemetry system is disclosed which utilizes a fluid feedback oscillator in conjunction with a flow restricting device in order to generate pulses in a fluid. Means are provided to

### **Oscillateur à fluide/302**

turn the oscillator on or off or to vary the frequency of oscillation, thereby permitting the transmission of information by means of the fluid pulses. Write: NTIS.

## **PAT-APPL-6-070 772**

### **Adjustable Parallel Fluidic Resistor Bank/302**

Filed August 30, 1979, by the Department of the Army. A fluidic resistor module, including resistor channels connected in parallel between two common ports, is permanently adjustable by deforming the cross sections of the individual channels by externally applied forces. The channels are formed on the interior surface of an exterior plate

### **Batterie réglable de résistances fluidiques parallèles/302**

of a bonded plate module, and the indicia indicating the locations of the channels are formed on the exterior surface of the plate. A pair of adjustable resistor modules are used to null opposed fluidic bias means in a laminar fluidic device. Write: NTIS.

**PAT-APPL-6-071 976**

**Electronic Symbology Generation for Radar Plan Position Indicator (PPI) Displays Using Rotating Coils/302**

Filed September 4, 1979, by the Department of the Army. This invention enables the generation of electronic symbology for display on the face of cathode ray tubes employing rotating coils. Offset centering and sweep disabling are

**Production de symboles électroniques sur des écrans panoramiques au moyen de bobines tournantes/302**

employed to permit symbology display for representing target location in range and bearing with respect to other locations on the display. Write: NTIS.

**PAT-APPL-6-074 634**

**Method and Apparatus for Reduction of Modal Noise in Fiber Optic Systems/302**

Filed September 12, 1979, by the Department of the Army. A dithering means is applied to a laser diode to provide dither modulation along with a signal input thereto. Modal

**Méthode et appareil de réduction du bruit modal dans les systèmes à optique de fibre/302**

noise, otherwise generated by the system, is reduced by the introduction of dither modulation. Write: NTIS.

**PAT-APPL-6-074 636**

**Fluidic Mud Pulsar/302**

Filed September 12, 1979, by the Department of the Army. A liquid telemetry system is disclosed useful for transmitting data through a fluid body by means of pulses in the fluid. To generate the pulses in the fluid the system utilizes a bi-stable fluid amplifier in conjunction with a vortex valve.

**Impulseur fluidique Mud/302**

Control input signals direct the flow of fluid from the bi-stable amplifier into the vortex valve in such manner as to selectively impede the flow of fluid through the vortex valve. The resulting changes in fluid flow rates generate pulses within the fluid body. Write: NTIS.

**PAT-APPL-6-077 442**

**Apparatus and Method for Temperature Compensation of Fluidic Circuits/302**

Filed September 20, 1979, by the Department of the Army. A temperature compensation device for a fluidic circuit is disclosed. The device comprises a high gain fluid amplifier having input and feedback resistors. The resistance to

**Méthode et appareil de compensation thermique de circuits fluidiques/302**

fluid flow through the input resistor is dependent upon fluid density, while the resistance to flow through the feedback resistor is dependent upon fluid viscosity. Write: NTIS.

**PAT-APPL-6-078 748**

**Fluidic Pulsar/302**

Filed September 25, 1979, by the Department of the Army. A fluid telemetry system is disclosed which utilizes an improved pulsing device. The pulsar comprises a bistable fluid amplifier. Both outlets of the bistable fluid amplifier

**Impulseur fluidique/302**

communicate tangentially with a vortex chamber. A pulse in the fluid entering the amplifier may be produced each time the fluid flow is diverted from one outlet to the other. Write: NTIS.

**PAT-APPL-6-078 996**

**A Variable Output Coupler for Laser Cavities with Totally Reflecting Mirrors/302**

Filed September 26, 1979, by the Department of the Army. This invention describes an output coupler, for laser cavities with totally reflecting mirrors, having a beam splitter and a mirror mounted so that the direction of the output beam of the laser is invariant to changes in the output coupling coefficients. The percentage of the laser's energy

**Un coupleur de sortie variable pour des cavités laser dotées de miroirs totalement réfléchissants/302**

which is coupled out into an external beam can be continuously varied or varied to obtain the optimum output coupling coefficient and then left set on this value. This device can also be used as a variable beam splitter with an invariant direction for the reflected beam when used external to the cavity of any laser. Write: NTIS.

**PAT-APPL-6-080 649**

**Irradiance Analyzer for High Power Lasers/302**

Filed October 1, 1979, by the Department of the Army. In accordance with this invention, a simple irradiance analyzer system is provided which includes an array of material which converts high power infrared laser beam to visible radiation and a Fresnel lens at an exit end of the array which collected and focuses visible radiation emitted

**Analyseur de l'éclairement énergétique de lasers grande puissance/302**

from the end surface of the array onto a film plane of a conventional high speed camera which photographs the image formed at the film plane. The film is then developed and analyzed by conventional densitometric methods to obtain the irradiance profile, from each film frame. Write: NTIS.

**PAT-APPL-6-080 907**

**Simplified System for Estimating Pulse Radar Doppler Frequency/302**

Filed October 1, 1979, by the Department of the Army. A method for determining doppler frequency by the measurement of the maximum pulse-to-pulse difference over one doppler cycle. A box-carried (sample-and-hold) phase

**Système simplifié pour l'estimation de la fréquence Doppler d'un radar à impulsions/302**

detector's output is differentiated to obtain pulses whose amplitude represents the amplitude of individual boxcar transitions. The largest pulse amplitude is selected for indication of doppler frequency. Write: NTIS.

**PAT-APPL-6-081 998**

**Nickel Analysis Device/302**

Filed October 4, 1979, by the Department of the Army. The nickel analysis device of this invention is comprised of a first automatic measuring system, a second automatic measuring system, and a colorimetric measurement system. The first automatic measuring system is provided with a means for transferring a sample of plating solution to be analyzed from a container to a first volumetric cup disposed to receive the solution into an inner section of the cup which is filled to over-flowing into an outer section of the first volumetric cup. The outer section of the first volumetric cup has means for draining solution to a container. The second automatic measuring system is of similar design to first automatic measuring system, but the second automatic measuring system is designed to measure and transfer a standard ammonium hydroxide solution.

**Dispositif d'analyse du nickel/302**

The first and second automatic measuring system delivers the predetermined volumes of plating solution and ammonium hydroxide solution into an absorption cell wherein a colored complex is formed. A colorimetric measurement system is employed to measure the transmittance of a monochromatic light which is proportionate to the nickel of the colored complex. A monochromatic light is passed through the colored complex to a detector and amplifier means which determines a detector value proportionate to the transmittance or absorption of the light. The detector value is amplified and compared with a detector value measured on a standard sample treated similarly and as corrected by a blank sample to determine the nickel content of the chemical plating solution. Write: NTIS.

**PAT-APPL-6-083 046**

**Omni-Directional Compound Paraboloid-Hyperboloid Radiation Device/302**

Filed October 9, 1979, by the Department of the Army. The invention is a device which receives radiation from a point source, from the sun, or from other means, said radiation being received on the surface of a mirrored paraboloid of revolution which is tracking the point source, though the source may be stationary, and reflects the radiation to the mirrored surface of a confocal hyperboloid of revolution whose shape is dependent on the distance to the desired

**Dispositif de rayonnement omnidirectionnel à réflecteur mixte paraboloid-hyperboloid/302**

second focus. The hyperboloid reflects radiation of high intensity to the second focus, where the flux is intensified, using a conical mirrored surface or a compound parabolic concentrator, to a flux intensity approaching the surface flux intensity of the sun. The radiation input to the device may also be from an array of point or distributed sources, such as from an array of lasers. Write: NTIS.

**PAT-APPL-6-083 071**

**Method of Operating a Cold Cathode-Cold Reservoir Thyatron/302**

Filed October 9, 1979, by the Department of the Army. This invention relates in particular to such a method using ZrVFe as the thyatron reservoir material. The general object of this invention is to provide a method of operating a cold-cathode-cold-reservoir thyatron for laser/radar and

**Méthode d'exploitation d'un thyatron à cathode froide — réservoir froid/302**

other systems employing high voltage and current pulses. A more particular object of the invention is to provide such a method using a suitable hydrogen thyatron reservoir material. Write: NTIS.

**PAT-APPL-6-084 048**

**Peierls-Transition Far-Infrared Source/302**

Filed October 12, 1979, by the Department of the Army. The present invention is directed to a radiation source which produces electromagnetic radiation in the far-infrared range. For certain radar applications it is desired to use radiation in the far-infrared range. Conventional solid-state radiators cannot produce radiation in the far-infrared part of the spectrum, and in general, the prior art has not produced a source which can effectively operate in this range. This is accomplished by providing a member made of an organic one dimensional metal; such a substance has the property of behaving like a metal along one crystal

**Source de rayons infrarouges lointains à transition Peierls/302**

direction only above a certain temperature known as the Peierls temperature. Below this temperature the material develops a gap (Peierls gap) at the metallic Fermi level which disappears when the crystal is stressed. The device is operated below the Peierls temperature and pressure is applied near the ends of the member, while a potential difference is applied to electrodes situated near the ends. The device emits narrow-band radiation centered around the transition frequency of the above-mentioned Peierls gap; the radiation is in the far-infrared region and extends down to millimeter ranges. Write: NTIS.

**PAT-APPL-6-084 984**

**Method and Apparatus for Removal of Sodium Carbonate from Cyanide Plating Baths/302**

Filed October 15, 1979, by the Department of the Army. The invention relates to metal plating systems, and in particular to plating systems using a cyanide solution as a plating

**Méthode et appareil pour l'extraction du carbonate de sodium des bains de placage au cyanure/302**

bath. Specifically, the invention relates to a method and apparatus for the removal of sodium carbonate from a cyanide-zinc plating bath solution. Write: NTIS.

**PAT-APPL-6-087 891**

**Fluidic Waste Gate/302**

Filed October 24, 1979, by the Department of the Army. In the combination of an internal combustion engine, a turbo-charger and a waste gate, the improvement is the waste gate which includes a fluidic device having its inlet and outlet connected in parallel with the turbine of the turbo-charger and a biasing port responsive to the output of the turbocharger to proportion the fluid flow from the inlet to

**Clapet de dérivation d'échappement à commande fluidique/302**

the outlet between two parallel fluidic paths having a high and low flow resistance respectively. The fluidic device is a fluid amplifier providing radial and tangential flow to a vortex valve to produce the low and high resistance fluidic paths respectively. Alternatively, the fluidic device could be in series with the turbocharger to backpressure the compressor of the turbocharger. Write: NTIS.

**PAT-APPL-6-092 123**

**Tie-Down Assembly/302**

Filed November 7, 1979, by the Department of the Army. This invention provides all the advantages of anchor bolts which project beyond floor and wall surfaces, those which are not used in cargo carrying or storing areas because projecting bolts are undesirable. The anchoring assembly of the invention will thus accept any type of plate provided

**Système d'amarrage/302**

with a hole or bore through which the anchor bolt will pass. Thus plates having tie-down straps therethrough, pallets, boxes, and chairs, beds and other equipment having attached base plates can be secured to recessed anchor studs by the use of this invention. Write: NTIS.

**PAT-APPL-6-092 130**

**Rivets for Structures Subject to Vibrations or Thermal Stresses/302**

Filed November 7, 1979, by the Department of the Army. Rivets are suitable for joining aircraft structures and components. But although rivets are generally easily set, they may be loosened during vehicle operation. Welding of the

**Rivets pour structures soumises à des vibrations ou des contraintes thermiques/302**

rivets is not entirely satisfactory. Rivets and method of riveting are provided for use in aircraft and other applications in which vibrations and thermal stresses reduce the effectiveness of conventional riveting. Write: NTIS.

**PAT-APPL-6-093 084**

**Fluidic Mud Pulse Telemetry Transmitter/302**

Filed November 9, 1979, by the Department of the Army. A fluidic pulsing device is disclosed which comprises at least one fluid amplifier and several vortex valve restrictors. One or more amplifiers direct fluid flow to the several vortex valves, which are arranged in parallel fashion. Such

**Émetteur de télémétrie pour des impulsions fluidiques Mud/302**

an arrangement allows for optimization of design geometries, and therefore, optimization of performance, despite the fact that the physical dimensions of the apparatus may be severely restricted. Write: NTIS.

**PAT-APPL-6-095 731**

**Antenna with Sum and Error Patterns/302**

Filed November 19, 1979, by the Department of the Army. It is the primary object of the present invention to provide a simplified short backfire antenna which is capable of directional radiation having both sum and error patterns in the H-plane. It is a further object of the invention to provide a short backfire antenna having sum and error patterns with improved resolution and gain. This is accomplished with a modified short backfire type antenna utilizing a rimmed metal pan reflector and a smaller disc reflector spaced along a common axis to form a resonant cavity. Three parallel dipoles are positioned between the reflectors, with

**Antennes ayant des diagrammes somme et erreur/302**

the center dipole excitation providing a sum pattern in both E- and H-planes, while the outer pair are fed out-of-phase to provide an error pattern having a broadside null in the H-plane. A hybrid circuit may be used in place of the center dipole in conjunction with two in-phase dipoles to achieve the same patterns. The sum pattern amplitude is made to exceed the error pattern only in the angular vicinity of the broadside null to achieve improved resolution and gain equivalent to a larger antenna. For simplicity in construction, an octagonal reflector pan and square shaped disc reflector are utilized. Write: NTIS.

**PAT-APPL-6-101 327**

**Gas Generator-Actuated Fire Suppressant Mechanism/302**

Filed December 6, 1979, by the Department of the Army. A fire-suppressant mechanism especially designed for suppressing near-explosive fires or slow growth fires in military vehicles. The mechanism includes a thick-walled bottle or container partially or wholly filled with liquid fire-suppressant, such as Halon 1301. A chemical gas-generat-

**Mécanisme de suppression des feux actionné par générateur de gaz/302**

ing cartridge is located at one end of the container for substantially instantaneously generating a very high gaseous pressure within the container, thereby very rapidly expelling the liquid suppressant from the container onto an emergent fire-ball. Write: NTIS.

**PAT-APPL-6-108 903**

**Digital Filter Bank Detector/302**

Price per copy from NTIS: PC U.S. \$14.00/MF U.S. \$3.50, filed December 31, 1979, by the Department of the Army. Disclosed is a signal detector including a bank of digitally synthesized narrowband filters all having the same shape of frequency response and differing only in center frequency and which are implemented by time domain data processing. The invention is comprised of: a signal conditioner, an envelope weighting computer, a Fourier transform processor and a post-detection processor. Resulting

**Détecteur à batterie de filtres numériques/302**

therefrom is a bank of 16 contiguous narrowband filters having high selectivity along with a corresponding bank of envelope detectors of wide dynamic range which incorporates center frequency acquisition and tracking. Following detection, a matched filter capability is included to provide correlation and data regeneration so that coded FSK data burst signals can be extracted in real time from noise, interference, and jamming signals which would otherwise affect signal detection. Write: NTIS.

**PAT-APPL-6-110 955**

**Near Millimeter Wave Generator with Dielectric Cavity/302**

**Générateur d'ondes presque millimétriques comprenant une cavité diélectrique/302**

Filed January 10, 1980, by the Department of the Army. A high frequency electromagnetic wave generator is disclosed which comprises an electron gun which directs an electron beam through a region generally adjacent a diffraction grating. The grating cooperates with an opposed

reflecting surface to produce a standing electromagnetic wave. The reflector comprises a highly reflective dielectric coated mirror. Supporting means for the diffraction grating may also comprise a reflective dielectric surface. Write: NTIS.

**PAT-APPL-6-110 958**

**Fluidic Oil Viscometer/302**

**Viscosimètre fluïdique pour les huiles/302**

Filed January 10, 1980, by the Department of the Army. A fluidic oil viscometer for determining the degradation of machinery lubricating oils compares the viscosity of the machinery oil with the viscosity of another fluid, such as air. Both the viscosity of the air and the viscosity of the oil are sensed, using capillary-orifice combination sensors, and the air viscosity reading is amplified using a series of

laminar proportional amplifiers to equalize its change in viscosity with that of oil. The outputs of the capillary orifice combination sensors are applied to two different pressure gauges, the difference between these two pressure gauges represents the viscosity breakdown. This difference will be independent of temperature. Write: NTIS.

**PAT-APPL-6-111 738**

**Broad Band Fluoric Amplifier/302**

**Amplificateur fluérique à large bande/302**

Filed January 14, 1980, by the Department of the Army. A broad band fluoric amplifier is disclosed which comprises means to increase the deflection of the fluid jet within the amplifier at higher frequencies of oscillation of the jet. The means for increasing jet deflection comprises vanes or

protrusions positioned closely adjacent the jet path at selected distances from the nozzle. Acoustic feedback from these vanes or protrusions will assist the control pulse in deflecting the jet at selected frequencies of oscillation. Write: NTIS.

**PAT-APPL-6-114 033**

**Method for Determining Oxidative Status of Unsaturated Lipids and Method for Evaluating Antioxidant Effectiveness in Lipid-Polypeptide Layers/302**

**Méthode de détermination de l'état oxydatif de lipides insaturés et méthodes d'évaluation de l'efficacité anti-oxydant de couches lipides-polypeptides/302**

Filed January 21, 1980, by the Department of the Army. A method for rapid, dry, non-destructive assay of the oxidative status of unsaturated lipids in whole foods, fats or oils and a method for prediction of the storage life of such lipids are disclosed. A method for evaluating the effective-

ness of natural or synthetic antioxidants in dry, thin layers of lipid supported on polypeptide is also disclosed. All of these methods depend on the fluorescence of compounds formed by the reaction of volatiles from oxidizing lipids and a polymerized epsilon-caprolactum. Write: NTIS.

**PAT-APPL-6-114 035**

**Method of Visually Detecting Antioxidant in an Organic Mixture/302**

**Méthode de détermination visuelle d'anti-oxygènes dans un mélange organique/302**

Filed January 21, 1980, by the Department of the Army. Method of screening a mixture of organic compounds to detect the presence of an antioxidant material wherein the organic mixture is first chromatographically separated on a polyamide coated plate and then coated with linoleic

acid. The plate is heated until the linoleic acid oxidation products react with the free amine groups on the polyamide material to produce a color change. Antioxidant compounds separated on the plate inhibit the color change and can be visually detected. Write: NTIS.

## **PAT-APPL-6-114 777**

### **A Half Duplex Integral Vocoder Modem System/302**

Price per copy from NTIS: PC U.S. \$8.00/MF U.S. \$3.50, filed January 23, 1980, by the Department of the Army. Disclosed is a system whereby in a transmit mode analog speech is sampled and converted digitally to 12 bits of accuracy and then fed into a fast Fourier transform (FFT) processor which analyses the speech into spectral and pitch parameters. These parameters are then quantized into a data stream which acts as an input to a differential phase shift keying modulator. The modulator constructs a multi-tone modem output signal from a 25 tone stack which is converted to an analog signal which is fed into a communications channel. In the receive mode a modem input signal from the communications channel is fed

### **Système à modem Vocoder exploitant une demie intégrale duplexe/302**

through the same analog to digital converter which was used for input speech. A data stream is now provided which is coupled back into the same digital FFT processor which now operates to provide pitch spectral coefficients which are then separated and used by a synthesizer to reconstruct a speech waveform. The speech waveform is applied to a digital analog converter which is the same converter used to produce the line signal when the processor operates in the transmit mode. The FFT processor implements a single FFT algorithm which is used for both vocoder and modem processing in both the transmit and receive modes. Write: NTIS.

## **PAT-APPL-6-118 044**

### **Drive Mechanism/302**

Filed February 4, 1980, by the Department of the Army. An elliptical wobble disk at its periphery engages a sine curve track, on a slide or on a drum, and slides the strip track or

### **Mécanisme d'entraînement/302**

rotates the drum as a preferred alternative to a gear drive. Write: NTIS.

## **PAT-APPL-6-132 940**

### **Steerable Null Antenna Processor with Gain Control/302**

Price per copy from NTIS: PC U.S. \$8.00/MF U.S. \$3.50, filed March 24, 1980, by the Department of the Army. An object of the invention is to provide a system with adaptive nulling when receiving over an extremely wide dynamic range. According to the invention, automatic gain control is incorporated not only in the antenna-correlator or reference branch, but also in the feedback branch of the sys-

### **Processeur d'antenne orientable avec mise à zéro doté d'une commande de gain/302**

tem, with the gain control voltages derived from a common source. This source includes at least the antenna-correlator or reference signal, and in one embodiment the automatic gain control signal is derived from a sum of the two detected signals. Square law detection is preferred in deriving the gain control signal. Write: NTIS.

## **PAT-APPL-6-132 941**

### **Adaptive Steerable Null Antenna Processor/302**

Price per copy from NTIS: PC U.S. \$8.00/MF U.S. \$3.50, filed March 24, 1980, by the Department of the Army. An object of the invention is to provide a steerable null antenna processor, in which the null developed during reception is also maintained during transmission. According to the invention, a receive-transmit steerable null antenna processor includes incrementally adjustable delay lines and

### **Processeur d'antenne orientable avec mise à zéro adaptatif/302**

an amplitude balance control network (variable ratio power) for adjusting the relative phase and amplitude of two or more antenna branches to steer a null on an interference source. Least-mean-squares loop control including In phase-Quadrature correlation provides feedback control signals which are converted to digital form to adjust the delay lines for phase and amplitude balance. Write: NTIS.

## **PAT-APPL-6-133 173**

### **Electromagnetic Interference Suppression in a Vehicle Horn Circuit/302**

Filed March 24, 1980, by the Department of the Army. In a military vehicle having an electric horn actuator circuit, the

### **Suppression de l'interférence électromagnétique du circuit du klaxon d'un véhicule/302**

improvement comprising the addition of a capacitor in the circuit at a location between a brush and contact ring

assembly disposed within the vehicle steering column. The capacitor is electrically located in close connection to the brush-contact ring interface to respond effectively to

voltage/current surges initiated at the brush-contact ring interface. the capacitor can be installed in existing vehicles in a retrofit operation. Write: NTIS.

### **PAT-APPL-6-138 477**

#### **MIC Combiner Using Unmatched Diodes/302**

Filed April 9, 1980, by the Department of the Army. In a microstrip circuit having dual diode driven, independently oscillating, half-wave open ring resonating sections, partially coupled quarter-wave ring sections are provided to permit matching and tuning of diodes having dissimilar negative impedances. The quarter wave ring sections are combined with appropriate line sections to accommodate the negative impedance devices. The diode circuits are connected to the low impedance points of the oscillating ring sections by the quarter-wave ring sections. Appro-

#### **Combinateur MIC utilisant des diodes non adaptées/302**

iate terminations to ground are provided to suppress possible oscillations in a bias circuit. Second and third harmonic traps are provided for use with TRAPATT diodes. Ground lines are provided to reduce circuit unbalance in the event of drastic power changes occurring on either side of the circuit which may otherwise result in odd mode operation. Slots are provided to suppress an undesired transverse resonance mode in the line sections accommodating the negative impedance devices. Write: NTIS.

### **PAT-APPL-6-146 580**

#### **Key-to-Address Transformation/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$6.50, filed May 5, 1980, by the Department of the Army. Storage or retrieval of a record from computer storage or memory is generally accomplished by scanning, searching, or direct addressing. Scanning a file of records to retrieve one particular record requires comparing its key with the key of one record after another until a match is found. Searching a file requires a proper organization of the records. Direct addressing involves assigning each record to a bin or bucket location (which is large enough to contain one or more records). The address of the bin is determined by means of a key-to-address, randomizing, or hashing transformation. Direct addressing provides the most rapid

#### **Transformations indicatif-adresse/302**

means of accessing a single record in a file. While being preferred, the process of transforming a record key, to a corresponding main memory or external storage address, giving the bin or bucket location where the record can be found, is subject to certain disadvantages. Neither complete randomization nor a completely uniform distribution results when keys are converted to addresses by the usual random conversion transformations or hashing techniques. A transformation or hashing process is provided herein which not only leads to a greater degree of randomness than those heretofore known, but is so general that it is effective for both static and volatile files, and works well will all types, ranges, and lengths of keys. Write: NTIS.

### **PAT-APPL-6-186 871**

#### **Flame Resistant Insulation Materials, Composition and Method/302**

Filed September 12, 1980, by the Department of Commerce. This patent application concerns flame retardancy of loosefill insulation materials, especially cellulosic insulation materials. More particularly, the invention relates to flame resistant insulation materials, methods of treating

#### **Matériaux isolants ignifuges, composition et méthodes de traitement/302**

insulation materials to render them flame resistant, compositions for imparting flame resistance to insulation materials, flame and smolder resistant compositions and flame and smolder resistant loosefill insulation materials. Write: NTIS.

### **PAT-APPL-6-192 129**

#### **Cryptographic Key Notarization Methods and Apparatus/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed September 29, 1980, by the Department of Commerce. The present invention relates in general to cryptographic methods and apparatus and in particular to cryptographic

#### **Méthodes et appareils d'authentification pour les clés cryptographiques/302**

key management methods and apparatus which protect cryptoalgorithm keys from disclosure and substitution. Write: NTIS.

## **PAT-APPL-6-078 758**

### **High Temperature Solar Energy Absorbing Surfaces/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed September 25, 1979, by the Department of Energy. A solar collector having an improved coating is provided. The coating is a plasma-sprayed coating comprising a material having a melting point above 500 exp 0 C at which it is stable and selected from the group of boron carbide, boron

### **Surfaces absorbantes d'énergie solaire fonctionnant à haute température/302**

nitride, metals and metal oxides, nitrides, carbides, borides, and silicates. the coatings preferably have a porosity of about 15 to 25% and a thickness of less than 200 micrometers. The coatings can be provided by plasma-spraying particles having a mean diameter of about 10 to 200 micrometers. Write: DOE.

## **PAT-APPL-6-085 551**

### **Method of Preparation of Novel Fiber Reinforced Titanium Diboride Composite Bodies and Uses Therefor/302**

Filed October 6, 1979, by the Department of Energy. Cloth is coated with titanium diboride in a chemical vapor deposition reaction under particular coating conditions which result in a uniform coating on the individual filaments making up the cloth fiber bundles. The coated cloth can be

### **Méthode de préparation de nouveaux corps de diborure de titane à fibre renforcée et applications/302**

used as deposited as electrodes, for example, or can be hot pressed to form highly spall-resistant structures having special utility in fusion reactors, for example, as wall armor. Write: DOE.

## **PAT-APPL-6-092 154**

### **Digital Pressure Transducer for Use at High Temperature/302**

Filed November 7, 1979, by the Department of Energy. A digital pressure sensor for measuring fluid pressures at relatively high temperatures includes an electrically conducting fiber coupled to the fluid by a force disc that causes tension in the fiber to be a function of fluid pressure. The tension causes changes in the mechanical reso-

### **Transducteur de pression numérique fonctionnant à des températures élevées/302**

nant frequency of the fiber, which is caused to vibrate in a magnetic field to produce an electrical signal from a positive-feedback amplifier at the resonant frequency. A count of this frequency provides a measure of the fluid pressure. Write: DOE.

## **PAT-APPL-6-165 690**

### **A Short Total Synthesis of Dihydrothebainone, Dihydrocodeinone, and Nordihydrocodeinone/302**

Filed July 3, 1980, by the Department of Health and Human Services. A method is presented for producing morphinan compounds which incorporates double advantages over the prior art, such as the utilization of beta, gamma-unsaturated ketones in place of the alpha, beta-unsaturated bromoketones proceed to 1-bromo-N-formlynordihydrothebainone (morphinan) there are utilized super acids, such as

### **Méthode courte pour la synthèse totale de la dihydrothébaïnone, de la dihydrocodéïnone et de la nordihydrocodéïnone/302**

trifluoromethane sulfonic, trifluoroethane sulfonic and mixtures thereof, and also antimony pentafluoride and mixtures of hydrogen fluoride and antimony pentafluoride. Super acids work, whereas the prior art shows that cyclization in the presence of acids, even strong acids, such as sulfuric, phosphoric, do not work. Write: NTIS.

## **PAT-APPL-6-173 521**

### **Castable High Temperature Refractory Materials/302**

Filed July 30, 1980, by NASA. A method is disclosed for fabricating chemically inert ceramic bodies that are both highly refractory and porous. A paste is formed by mixing alumina grain having uniform particle size with colloidal silica that is stabilized with ammonia. After drying, the cast body has sufficient green strength to be handled, and it is transferred to a furnace for curing. A green body prepared

### **Matériaux réfractaires moulables à haute température/302**

in this fashion does not undergo shrinkage during curing nor during prolonged subsequent heating. Write: NASA, Lewis Research Center, 21000 Brookpark Road, Cleveland, Ohio 44135 and send a copy of your initial correspondence to Canadian Consulate, Illuminating Building, 55 Public Square, Cleveland, Ohio 44113, U.S.A.

## **PAT-APPL-6-172 098**

### **Active Notch Filter Network with Variable Notch Depth, Width and Frequency/302**

Filed July 15, 1980, by NASA. An active notch filter having independently adjustable notch frequency, width, and depth is provided by three equal capacitors connected in series with an operational amplifier (connected in a voltage follower configuration), a potentiometer across the series connected capacitors for notch depth adjustment, and a potentiometer (for notch frequency connected across the center capacitor); with its tap connected to receive a voltage feedback signal from a variable voltage divider comprised of another potentiometer for notch width. Adjusting the voltage dividing potentiometer will independently set

### **Réseau de filtres à échelons actifs de profondeur, largeur et fréquence variables/302**

the notch width, and adjusting the tap on the potentiometer across the center capacitor will independently adjust the notch frequency of the filter. A second operational amplifier connected in a voltage follower configuration may be used to connect the voltage divider output to the adjustable tap of the potentiometer across the center capacitor. Write: NASA, Hugh L. Dryden Flight Research Center, Edwards, California 93523 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

## **PAT-APPL-6-173 520**

### **Method for Milling and Drilling Glass/302**

Filed June 30, 1980, by NASA. A process is disclosed for machining glass in which a rotating carbide working surface is placed under minimum pressure against an area of glass to be worked. Concurrently, the region between the working surface and the area of glass is wetted with a lubricant consisting essentially of a petroleum carrier, a com-

### **Méthode de fraisage et de perçage du verre/302**

plex mixture of esters, and a complex mixture of naturally occurring aromatic oils. Write: NASA, Goddard Space Flight Center, Mail Code: 204, Greenbelt, Maryland 20771 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

## **PAT-APPL-6-173 524**

### **Low Intensity X-Ray and Gamma-Ray Imaging Spectrometer/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed July 30, 1980, by NASA. An imaging spectrometer includes a shield which is opaque to visible light and transparent to X-ray or gamma-ray photons, and a scintillator which converts the X-ray or gamma-ray photons to visible-light photons. An input fiber optics plate guides the visible light photons in the same spatial position to photocathode which converts them to photoelectrons. A chevron, curved, or Z configuration microchannel plate amplifier, operated far below saturation, but capable of a 10 to the 4th to 10 to the 7th power gain, receives the photoelectrons

### **Spectromètre imageur de rayonnements X et gamma faible intensité/302**

and intensifies them. The intensified electrons are then converted back to visible-light photons by an output phosphor screen. An output fiber optics plate guides the visible-light photons in the same spatial position to a digitizing video camera and a digital information processor which indicates the spatial position, number, and efficient energy of the incoming X-ray or gamma-ray photons. Write: NASA, Goddard Space Flight Center, Mail Code: 204, Greenbelt, Maryland 20771 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

## **PAT-APPL-6-161 256**

### **Photocapacitive Image Converter/302**

Filed June 20, 1980, by NASA. Apparatus is described for converting a radiant energy image into corresponding electrical signals including an image converter. The image converter includes a substrate of semiconductor material, an insulating layer on the front surface of the substrate and an electrical contact on the back surface of the substrate. A series of parallel transparent conductive stripes is on the insulating layer with a processing circuit connected to each of the conductive stripes for detecting the modulated voltages generated. In a first embodiment of the invention, a modulated light stripe, perpendicular to the conductive stripes scans the image converter. The resulting modulated signals generated on the conductive stripes are detected by the processing circuits to produce signals that

### **Convertisseur d'images photocapacitif/302**

represent the image focused on the image converter. In a second embodiment of the invention a second insulating layer is deposited over the conductive stripes, and a second series of parallel transparent conductive stripes perpendicular to the first series is on the second insulating layer. A different frequency current signal  $F_{sub n}$  is applied to each of the second series of conductive stripes, and a modulated image is applied to the image converter. The resulting signals detected by the processing circuits represent the image. Write: NASA, Langley Research Center, Mail Code: 279, Hampton, Virginia 23665 and send a copy of your initial correspondence to Canadian Consulate, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102, U.S.A.

**PAT-APPL-6-172 099**

**Complementary Cross-Slot Phased Array  
Antenna/302**

Filed July 25, 1980, by NASA. A flush mounting, cavity-backed, dual orthogonal slot antenna is described in which improved radiation pattern characteristics are obtained by making the spiral slot pattern elliptical in the aperture plane. Coaxial split-tube baluns are used to drive the junctions between corresponding slot pairs. Optional cavity dielectric is provided and a drive coupling arrangement includes a four port compartor hybrid having sum and differ-

**Antenne-réseau à fentes croisées  
complémentaires en phase/302**

ence ports respectively, for alternate excitation to produce a single lobe or a double lobe pattern with null. Switching apparatus is provided to connect a common terminal to either of the ports. Write: 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, U.S.A.

**PAT-APPL-6-173 518**

**Reconfiguring Redundancy  
Management/302**

Filed July 20, 1980, by NASA. Input signals from sensors in a redundancy management system are provided redundantly in parallel so that a primary control signal may be selected. Median value signals from groups of three sensors are detected in median value selectors of selection filters. The detected median value signals are then also compared in a subtractor/comparator to determine whether any of them exceeds the others by an amount

**Réorganisation de la gestion des  
redondances/302**

greater than the signal level for a failed sensor. If so, the lowest level detected median value signal is sent as the primary control signal. Write: 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, U.S.A.

**PAT-APPL-6-168 944**

**Apparatus for Sequentially Transporting  
Containers/302**

Filed July 11, 1980, by NASA. An apparatus for transferring and manipulating a plurality of containers in a sequence is disclosed including a mechanical manipulator arm having a gripping device which automatically picks up a container at a fixed pickup position and transfers it to a processing station. At a processing station, the container is loaded with silicon wafers and thereafter returned to the pickup and return station. A plurality of the containers may be processed in sequence from the fixed pickup position by providing a movable carriage upon which container pedestal platforms are supported, at least one of which is an

**Appareil de transport séquentiel des  
conteneurs/302**

elevator platform. Sensing switches may be provided for sensing movements of the arm, carriage, and elevator platform whereby the entire apparatus may be controlled automatically avoiding the need to handle the wafers manually to reduce the possibility of contamination. Write: NASA, Marshall Space Flight Center, Mail Code: CC01, Huntsville, Alabama 35812 and send a copy of your initial correspondence to Canadian Consulate General, 900 Coastal States Building, 260 Peachtree Street, Atlanta, Georgia 30303, U.S.A.

**PAT-APPL-6-168 943**

**Pressure Suit Joint Analyzer/302**

Filed July 11, 1980, by NASA. A measurement system for simultaneously measuring torque and angular flexure in a pressure suit joint. One end of a joint under test is held rigid, and a torque transducer is pivotably supported on the other movable end of the joint. A potentiometer is attached to the transducer by an arm. The wiper shaft of the potentiometer is gripped by a reference arm that rotates the wiper shaft the same angle as the flexure of joint. A signal, generated by the potentiometer, is representative of the

**Analyseur de joint de combinaison sous  
pression/302**

joint flexure angle, and a compensation circuit converts the output of the transducer to a signal representative of joint torque. Write: NASA, Ames Research Center, Mail Code: 200-11A, Moffett Field, California 94035 and send a copy of your initial correspondence to Canadian Consulate General, One Maritime Plaza, Alcoa Building, Suite 1100, Golden Gateway Center, San Francisco, California 94111, U.S.A.

## **PAT-APPL-6-171 927**

### **Superconducting Gyrocon for High Power High Efficiency Microwave Generator/Amplifier Application/302**

Filed July 18, 1980, by NASA. The superconducting gyrocon includes an electron gun, a deflection cavity, means for coupling RF energy into the deflection cavity, an output cavity, and an output coupler for removing energy from the output cavity. The inner surface of the deflection cavity and the inner surface of the output cavity or resonator is formed of a superconducting material such as Nb<sub>3</sub>Sn, lead, or niobium. The two cavities are submerged in liquid helium in order to maintain the superconducting material at a temperature of approximately 4 degrees Kelvin.

### **Gyrocon superconducteur pour générateur/amplificateur micro-ondes à forte puissance et rendement élevé/302**

Characteristics of the thus cooled superconducting material minimizes RF losses within the gyrocon, and allows the power gain of a conventional gyrocon to be increased from approximately 13 db to 54 db, and its efficiency from 82 percent to 92 percent. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

## **PAT-APPL-6-173 519**

### **Automotive Absorption Air Conditioner Utilizing Solar and Motor Waste Heat/302**

Filed July 30, 1980, by NASA. An absorption cycle air conditioning system for use as a space cooling system in an electrically powered motor vehicle is disclosed. The system is of a lightweight design and has a capability for achieving vehicular space cooling with minimal attendant power requirements. The system is adapted to utilize solar

### **Appareil de climatisation automobile a absorption utilisant l'énergie solaire et la chaleur de déperdition du moteur/302**

and motor waste heat. Write: Monte F. Mott, Patent Counsel, NASA Resident Legal Office, Mail Code: 180-601, 4800 Oak Grove Drive, Pasadena, California 91103 and send a copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014, U.S.A.

## **PAT-APPL-6-118 043**

### **Electrical Connection/302**

Filed February 4, 1980, by the Department of the Navy. A mechanical and electrical connection for a piezoelectric member of polymeric material such as polyvinylidene fluoride, and method for forming such a connection. To form the connection, the piezoelectric member is first masked to prevent a preselected portion of its surface from being coated during subsequent coating operations. An electrically conductive member such as a lead wire or a solderable terminal is then attached to the nonmasked area of the piezoelectric member with adhesive such as epoxy. The masked piezoelectric member, the electrically conductive member, and (incidentally) the mask are then coated with a conductive coating such as sputtered gold to electrically connect the conductive member to the piezoelec-

### **Connexion électrique/302**

tric member. The mask can now be removed from the piezoelectric member if desired, although it can be left in place as a convenient vise. If the conductive member is a wire, adjacent portions of the wire and the piezoelectric member can now be coated with additional epoxy to provide heat dissipation for and protect the electrical connection provided by the conductive coating, and to insure mechanical strength of the contact. If the conductive member is a terminal strip or solderable terminal, a wire can now be soldered to the conductive coating at the terminal using low temperature solder. The solder joint can then be coated with silver-filled paint to produce a lower current density and lower contact resistance in the vicinity of the contact. Write: NAVY.

## **PAT-APPL-6-118 132**

### **Protective Coating/302**

Filed February 4, 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 temperatures, 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

### **Revêtement de protection/302**

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: NAVY.

## **PAT-APPL-6-126 588**

### **Apparatus and Method for Multiplexing Digital Signals/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed March 3, 1980, by the Department of the Navy. The invention is an apparatus and method for multiplexing digital information acquired from a multiplicity of data terminals distributed along a conductor of given length. A cyclic synchronization signal consisting of a stream of coding periods is transmitted upon the conductor. The duration of each coding period exceeds the two way travel time through the conductor. The leading edge of a coding period stimulates the transmission of one bit of a digital

### **Appareil et méthode de multiplexage des signaux numériques/302**

word stored in each terminal. The bits from the terminals arrive at a system receiver in a time sequence corresponding to the spatial distribution of the terminals. Bits are collected in storage registers according to their significance which is determined by the respective coding period during which they are received. A word from a particular terminal is derived by strobing the output of the storage registers at the time corresponding to the position of the terminal. Write: NAVY.

## **PAT-APPL-6-142 322**

### **Towed Deployment Acoustic Arrays/302**

Filed April 21, 1980, by the Department of the Navy. A compact, unitary sensor array support structure for use in a water medium comprises a plurality of scissor arms mounted on a support. The scissor arms are extended from the support to expand the sensor array, and are retracted to the support when the array is to be recovered. The support

### **Réseaux acoustiques déployables pouvant être remorquées/302**

with the scissor arms retracted thereto is slidably housed within a container. Together, the support and the container form a hydrodynamic body which can be transported by towing in the water or removed from the water for transport or storage. Write: NAVY.

## **PAT-APPL-6-154 348**

### **Method of Separating Light Isotopes Like $^{15}\text{N}$ from Naturally Abundant Gases, Such as $\text{NO}$ /302**

Filed May 29, 1980, by the Department of the Navy. A method of separating and concentrating the  $\text{N}(15)$  isotope from natural abundance nitric oxide ( $\text{NO}$ ), comprising mixing the natural abundance nitric oxide in an appropriate mole ratio with carbon dioxide ( $\text{CO}_2$ ); irradiating the  $\text{NO-CO}_2$  mixture with coherent laser light of a desired wave-

### **Méthode de séparation des isotopes légers comme le $^{15}\text{N}$ des gaz abondants dans la nature comme le $\text{NO}$ /302**

length, thereby selectively exciting the nitric oxide species containing the  $^{15}\text{N}$  isotope, which subsequently reacts with the carbon dioxide to form nitrogen dioxide  $\text{N}(15)\text{O}_2$ ; and separating said nitrogen dioxide  $\text{N}(15)\text{O}_2$  from the gas mixture. Write: NAVY.

## **PAT-APPL-6-156 441**

### **Intense Ion Beam Generation with an Inverse Reflex Tetrode (IRT)/302**

Filed June 4, 1980, by the Department of the Navy. An inverse reflex tetrode (IRT) for producing an intense pulsed beam of ions includes a real cathode having a curved or conical surface which is substantially transparent to the ions; first anode and second anode, or grid, which are spaced apart and are at the same potential, the first anode being between the real cathode and the second anode and having a curved or conical surface approximately parallel to the surface of the real cathode, and also being formed from a dielectric material such as polyethylene; a curved or conical hollow anode stalk which supports both anodes; and a virtual cathode which is formed by electrons that are emitted by the real cathode and pass through the first anode. The real cathode and first and second anodes are

### **Production d'un faisceau d'ions interne au moyen d'une tétrode réflex inverse/302**

enclosed in a vacuum chamber and are immersed in an applied external magnetic field. The IRT receives an electrical pulse from a high-voltage pulse generator. The real cathode emits electrons which accelerate toward the first anode, pass through the first anode and form a virtual cathode between the first and second anodes. Most of the electrons oscillate between the virtual cathode and the real cathode and form a plasma sheath on the surfaces of the first anode. Some ions from the plasma propagate toward the second anode, and some ions propagate toward the real cathode. The ions arrive at the second anode with zero velocity, while the other ions pass through the real cathode and form a propagating ion beam. Write: NAVY.

**PAT-APPL-6-158 006**

**Transformer Core Clamp/302**

Filed June 9, 1980, by the Department of the Navy. This report describes a transformer core clamp that increases both the clamping force applied to a center leg to the transformer core and the shock resistance of the transformer core. The clamp is constructed with opposed clamp plates on the outward facing sides of opposed core members. The outward facing sides of the core members are tapered from the midsection of the core member to the ends of the core members. The plates are connected by tension members and fasteners which are adjustable to tighten the plates against the core members. The tension members are posi-

**Dispositif de serrage d'un noyau de transformateur/302**

tioned at opposed ends of the core and on either side of a core midsection adjacent the center leg of the core. The clamp plates abut the midsection of the core members and, with the end tension members, act as a lever arm to exert increased compressive force on the midsection of the core members adjacent the center leg. The midsection tension members apply additional compressive force on the center leg to reduce the air gap and the noise of the transformer and increase the shock resistance of the core thus preventing misalignment of the core members. Write: NAVY.

**PAT-APPL-6-160 877**

**Environmental Mapping System/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed June 19, 1980, by the Department of the Navy. A circuit which detects environmental sources of echos received by a pulse-echo system such as a radar and classifies the sources of the echo at each range resolution cell as either short-pulse interference, rain clutter or jamming, distributed land clutter, an isolated target or thermal noise. The circuit implements on the screen of a cathode ray tube a digital map of a selected echo source type by modulating the electron beam intensity with a binary digit (0 or 1) at each increment of the sweep corresponding to a range resolution cell. The circuit utilizes a pulse-to-pulse non-coherent subtraction to remove correlated echos, leaving

**Système de cartographie des échos de l'environnement/302**

only uncorrelated type echos. Short-pulse interference is then detected and the uncorrelated echo component is compared to thermal noise to determine if rain clutter or noise jamming is present. The threshold for either target detection or land clutter is determined from the uncorrelated echo component, and all correlated targets and land clutter are next detected. The correlated echos are separated into distributed land clutter and isolated targets by the following procedure: the isolated targets are required to have uncorrelated echos on each side of them in range. Finally, if no detection of any of these types is made, thermal noise is declared. Write: NAVY.

**PAT-APPL-6-161 615**

**Portable On-Site Turning Apparatus/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed June 20, 1980, by the Department of the Navy. A turning apparatus, intended to be mounted on a work shaft for in-place cutting, may include a pair of mounting rings which are attachable to the shaft and which support a longitudinal annulate frame assembly which rotates about the area to be cut. A drive assembly is mounted on a mounting ring and engages a ring gear attached to the frame assembly for providing it rotational force. A longitudinal track assembly is mounted on and extends between

**Appareil portatif de tournage sur place/302**

the ends of the frame assembly. A carriage assembly is slidably mounted on the track assembly and is in operational engagement with a lead screw which is also mounted on the track assembly. The carriage assembly is adapted to hold a cutter for machining the shaft surface as the frame assembly rotates. A hydraulic indexing device incrementally rotates the lead screw in synchronism with the rotation of the frame assembly to move the carriage assembly and the cutter along the axis of the work piece. Write: NAVY.

**PAT-APPL-6-162 346**

**Autocorrelation Sidelobe Reduction Device for Phase-Coded Signals/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed June 23, 1980, by the Department of the Navy. A pulse compression decoder which oversamples by two the signal elements of a received phase-coded signal, performs a pairwise average on the signal elements at intervals equal to  $1/2$  the width of a signal element, reverse-codes the pair-

**Dispositif de réduction de la bande latérale à autocorrélation pour signaux à modulation de phase/302**

wise averages, combines the pairwise averages to form a sub-accumulation signal, and performs a pairwise average on the sub-accumulation signals at intervals equal to  $1/2$  the width of a signal element to produce a compressed pulse having a high peak-to-side lobe ratio. Write: NAVY.

**PAT-APPL-6-162 702**

**Slow-Wave Wideband Cyclotron Amplifier/302**

Filed June 24, 1980, by the Department of the Navy. A slow-wave, cyclotron-type, travelling-wave-tube amplifier in which the beam-wave interaction is the result of a Weibel-type instability. The travelling wave is slowed down in its

**Amplificateur cyclotron d'onde lente à large bande/302**

propagation through the waveguide by a dielectric liner located on the inner wall of the waveguide. The bunching mechanism is the result of the  $V \times B$  Lorentz force. Write: NAVY.

**PAT-APPL-6-163 000**

**High-Agility Reflector Support and Drive System/302**

Filed June 25, 1980, by the Department of the Navy. An apparatus for positioning a device such as an antenna, mirror or flat reflector, the latter defining a mounting plane which is selectively rotatable about mutually perpendicular axes with respect to a base member defining a base plane. The base and mounting planes are characterized by a respective set of four suspension points lying in each plane. The two sets of suspension points are arranged in like geometric symmetry and define rhombi lying in each of the planes. Four support arm members join the base and mounting planes and are terminated at opposed pairs of suspension points in the planes. Each support arm member includes a linear actuator and has upper and lower joints at its respective ends. A gimbal having a longitudinal

**Socle et système d'entraînement de réflecteur très mobiles/302**

rotation axis is rotatably mounted to the mounting plane such that the longitudinal rotation axis of the gimbal passes through the upper joints associated with one pair of diagonally opposite support arm members. A pin is fitted transversely to the gimbal and is rotatably mounted to the base plane such that the longitudinal rotation axis of the pin passes through the upper joints associated with the other pair of diagonally opposite support arm members when the base and mounting planes are parallel. The apparatus is driven by simultaneously increasing the length of one of the linear actuators in a diagonally opposite pair while diminishing the length of the other linear actuator in the diagonally opposite pair. Write: NAVY.

**PAT-APPL-6-165 817**

**Control System for Solar-Assisted Heat Pump System/302**

Price per copy from NTIS: PC U.S. \$6.50/MF U.S. \$3.50, filed July 3, 1980, by the Department of the Navy. A control system for a solar-assisted heating and cooling system including a solar collector system, a thermal storage system, a water-to-air heat pump, a water-to-air heat exchanger, a domestic water heater, and a cooling tower. The preferred embodiment of the controller of the present invention includes a first temperature sensing means for sensing the temperature of the collector fluid at the outlet of the solar collector system, a second temperature sensing means for sensing the temperature of the storage fluid at the thermal storage system, and a third temperature sensing means for sensing the temperature of the inlet water to the domestic water heater. The controller energizes or deenergizes a collector fluid circulation pump and activates valve means to

**Dispositif de régulation pour système de pompe à chaleur à appoint solaire/302**

circulate the collector fluid between the collector system and the thermal storage system or the domestic water heater based on the temperature of the three sensors to provide efficient operation of the solar energy collection process. The controller compares the temperature of the thermal storage fluid with three control temperatures which define four temperature ranges. The controller, based on the temperature range in which the temperature of the thermal storage fluid falls, whether the system is in the heating or cooling mode, and whether there is a demand for heating or cooling automatically controls the thermal storage system, the heat pump, the heat exchanger, the cooling tower, and the connections therebetween to provide increased efficiency. Write: NAVY.

**PAT-APPL-6-166 413**

**Maximum Depth Monitoring Apparatus/302**

Filed June 7, 1980, by the Department of the Navy. In a diver safety apparatus, a depth monitoring device is included for monitoring the maximum depth of a diver during the period that the diver is submerged in an underwater environment. A maximum depth display is coupled to the depth monitor to enable the diver to quickly determine, at

**Contrôleur de profondeur maximale/302**

any given time during the period, his maximum depth of submergence up to such given time. When the diver reaches a preselected critical maximum depth, an audio alarm coupled to the depth monitor is activated to alert the driver. Write: NAVY.

## **PAT-APPL-6-167 275**

### **A Sawtooth Waveform Generating Circuit for Utilization in a Helmet Mounted Display/302**

Filed July 19, 1980, by the Department of the Navy. A sawtooth waveform circuit for a cathode ray tube display apparatus or the like is disclosed for providing a sawtooth waveform signal in synchronization with the uniformly spaced pulses of a sync signal. A direct current voltage is supplied to an integrator which produces a ramp voltage. Switching means responsive to each pulse of the sync signal shorts

### **Circuit générateur d'ondes en dents de scie pour un dispositif d'affichage monté sur un casque/302**

the integrator so as to cause the ramp voltage to appear at the output of the integrator as a sawtooth waveform signal. A summing amplifier amplifies the sawtooth waveform signal, and then combines the amplifier sawtooth waveform signal with a variable direct current voltage generated by a head tracker so as to provide at the output of the summing amplifier a raster drive signal. Write: NAVY.

## **PAT-APPL-6-168 974**

### **Flexible Side Connector for Floating and Elevated Platforms/302**

Filed July 14, 1980, by the Department of the Navy. The present invention comprises a flexible side connector assembly comprising an in line flexural system having a plurality of rubber compression elements and a solid shear member. Both the adjacently aligned flexural member and the shear member have grooved solid heads at opposing ends of the assembly for insert of guillotines in opposing platforms which are to be coupled together. The combination of flexibility and rigidity, as found in the instant invention, allows connected platforms to roll with respect to

### **Connecteur latéral souple pour plateformes flottantes et soulevées/302**

each other. Translation freedom in the vertical, lateral and longitudinal direction is prohibited. Roll around the longitudinal axis of the platforms is allowed or accommodated for. Roll around the lateral and vertical axis of the platforms is prohibited by the fact that two connectors, located toward opposite ends of the abutting sides of two platforms being connected together, form a resisting moment equal to the translation resistance times the distance between each connector. Write: NAVY.

## **PAT-APPL-6-168 987**

### **Dual Dependent Stores Ejector Assembly for Angular Rate and Position Control/302**

Filed July 14, 1980, by the Department of the Navy. A dual dependent ejector assembly for ordnance stores on aircraft, etc. which imparts to the store, in addition to normal ejecting forces, an angular rate of movement and/or an angular attitude. The ejecting forces are applied at fore and aft locations on the store (e.g., bomb) by piston-like ejectors which are actuated by hydraulic circuitry. Dual

### **Ensemble d'éjection de charges à dépendance double pour le contrôle de la position et de la vitesse angulaire/302**

dependency is achieved by the action of a stepped piston which transmits equal volumes of fluid from two source chambers to each of the two ejectors. A third chamber in which the stepped piston operates supplements the fluid supplied to the ejectors by the first two chambers by means of a valve distribution system which includes two pressure responsive spool valves. Write: NAVY.

## **PAT-APPL-6-170 492**

### **Array Convolver/Correlator/302**

Filed July 21, 1980, by the Department of the Navy. An array convolver and/or correlator comprises first and second two-dimensional shift registers defined by N rows and M columns, corresponding columns, the first, the second, etc., of the two registers being aligned. N and M are generally in the range of 4 to 512. Data is capable of entering at least one of the left or right columns of each of the two shift registers. The data shifts downward to the bottom

### **Composeur/corrélateur de matrices/302**

row in the first, upper, shift register and upward to the top row in the second, lower, shift register. A plurality of M analog multipliers each has an input from corresponding, aligned columns of each of the two registers. An analog summer has M inputs, one from each of the multipliers. The output of the summer is a correlation or convolution, depending upon which specific columns the data enters. Write: NAVY.

**PAT-APPL-6-172 848**

**Method and Composition for Cleaning  
Metal Surfaces/302**

**Nettoyage de surfaces métalliques à  
l'aide d'une pâte: méthode et  
composition/302**

Filed July 25, 1980, by the Department of the Navy. A method of cleaning metal surfaces, particularly irregular-shaped metal surfaces such as exist on a ship, wherein a thick aqueous solution of a water soluble polymer, preferably polyvinylpyrrolidone (PVP), and a chelating agent, is

applied to a rusty metal surface as a thick paste, which gradually hardens into an encapsulating film during cleaning. After cleaning is complete, the film and the corrosion products are easily peeled from the clean surface and can be disposed of the solid waste. Write: NAVY.

**PAT-APPL-6-175 454**

**Method of Synthesizing Resin  
Prepolymers/302**

**Méthode de synthèse de résines  
prépolymères/302**

Filed August 5, 1980, by the Department of the Navy. An improved method of synthesizing bisorthodinitriles where R is an aliphatic or aromatic radical is described it involves dissolving the reactants in a dipolar aprotic solvent such as dimethylformamide, and heating the mixture to reflux

until the completion of the reaction. The usage of such solvents permits the reaction to be completed at least ten times as fast as the prior-art method, while the volume of solvent used is also reduced by a factor of ten. Write: NAVY.

**PAT-APPL-6-181 524**

**Cable Connector/302**

**Connecteur de câble/302**

Filed August 26, 1980, by the Department of the Navy. The document describes a connector for joining a fiber optic cable. The connector is constructed with a thin wall tube enclosing strips of a shape memory alloy material. The strips are bent and inserted into the thin wall tube such that an axial cavity is formed between the opposing strips. The axial cavity provides a self-centering mechanism for

positioning fiber optic cables along the central axis of the tube. Dimensions of the tube and shape memory alloy strip are chosen such that fiber optic cables inserted into each end of the connector when it is above the transition temperature range of the strips will be forced into coaxial alignment when the connector is cooled to a temperature below the transition range of the strips. Write: NAVY.

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

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

### T6490 — Loop-the-Hoop Exerciser/302

The loop-the-hoop device combines the fun of the famous hula hoop with the beneficial exercise of a skipping rope.

### T6491 — Eye-Coolers for Sunbathers/302

This patented device is a means for sunbathers to relieve eye discomfort caused by the heat of the sun. Sunbathers have long been faced with a particular dilemma. When unprotected, the sensitive eyelids and the area around the eyes quickly become uncomfortable with the sun's heat. If some kind of protection, such as pads or sunglasses, is worn, the eye area remains untanned, and this "white eyes" appearance is not appealing to people who wish to obtain a substantial suntan. Eye coolers allow for uniform tanning and provide effective cooling. The device consists of eyewear, something like sunglasses, made of transparent plastic. The eyepieces are formed of a double layer of plastic, with the space between filled with water or another liquid. An elastic or adjustable strap holds the eye-coolers in place regardless of the wearer's movements. The eye-coolers are chilled in a refrigerator or cold water before use and retain their cooling effect long enough to help a sunbather until he is ready to re-orient his position. License of the patent is available for a front-end payment plus a royalty on retail sales, with an annual minimum required.

### T10723 — Battery-Powered Casting Control for Sport Fishing/302

This casting control for sport fishermen is powered by two or three double A penlight batteries (depending on the model). The fishermen sets it for short, medium, or long casts, and it automatically releases the correct amount of line for the proper casting distance. It allows the sport fishermen to use the same casting action no matter what the distance, giving him considerably more consistency

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

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

### T6490 — Exerciseur de type corde à sauter/302

Ce type d'exerciseur (loop-the-hoop) allie le plaisir du cerceau *hula hoop* et les bienfaits de sauter à la corde.

### T6491 — Lunettes réfrigérées pour amateurs de bains de soleil/302

Ce dispositif breveté fournit aux amateurs de bains de soleil le moyen de soulager les yeux de l'inconfort provoqué par la chaleur du soleil. Ces personnes font depuis longtemps face à un dilemme: sans protection, les paupières et la région autour de l'oeil sont vite incommodées par la chaleur du soleil, mais si les yeux sont protégés par des tampons ou des verres fumés, la région des yeux ne bronze pas et la blancheur des orbites déplaît aux personnes qui désirent un bronzage parfait. Les lunettes réfrigérées permettent un bronzage uniforme tout en assurant un refroidissement efficace. Elles ressemblent à des lunettes ordinaires mais sont faites de plastique transparent. Les "oculaires" sont composés de deux couches de plastique séparées par une couche d'eau ou d'un autre liquide. Une bande élastique ou une courroie réglable permet de maintenir en place les lunettes malgré les mouvements de la personne qui les porte. Les lunettes sont placées dans un réfrigérateur ou dans de l'eau froide avant utilisation et conservent leur pouvoir réfrigérant assez longtemps pour permettre à la personne qui les porte de prendre du soleil jusqu'à ce qu'elle décide de changer de position. La licence peut être obtenue contre versement d'un montant forfaitaire initial et paiement de redevances sur les quantités vendues au détail, un minimum annuel étant exigé.

### T10723 — Commande à pile de moulinet pour la pêche au lancer/302

Cette commande de moulinet pour la pêche sportive est alimentée par deux ou trois piles AA (selon le modèle). Le pêcheur règle la portée du lancer (courte, moyenne, longue) et la commande dévide automatiquement la bonne longueur de ligne. Elle permet au pêcheur d'utiliser le même mouvement pour lancer à n'importe quelle distance améliorant ainsi considérablement l'uniformité et la préci-

and accuracy in his casting. It is usable with both open and closed-faced spinning reels. This casting control is available as a unit or in combination with a casting rod. The device is made of molded plastic and prototypes are available. License of the patent for manufacture and marketing is available in the U.S. and Canada.

### **T10750 — Sailboards: Know-How in Manufacturing and Design/302**

Sailboarding is a new sport in which an individual sails from a standing position. The device looks like a surfboard with a sail attached. Even in very light winds, a sailboard offers the sensation of speed. This technology is offered by an experienced sailboarder who designed and built sailboards from the start. He offers his know-how in the use, design, and manufacturing of sailboards to parties interested in starting an operation; the know-how includes manufacturing processes, knowledge of specifications for hardware and parts, and assistance with sales, packaging, and marketing. The technology is available worldwide. Terms are negotiable on a case-by-case basis.

### **T10980 — Floating Jigsaw Puzzles for Swimming and Wading Pools/302**

This technology for the toy and novelty field is a copyrighted design for floating jigsaw puzzles to be assembled in swimming and wading pools. It is ideal for the jigsaw puzzle fanatic to play with on a hot summer day. An individual swimmer can use the puzzle by swimming about the pool to gather the pieces and fit them together. Or the pieces for two or more puzzles can be scattered over the pool and swimmers can race to be the first to assemble their puzzle. Smaller children can amuse themselves by assembling the puzzle while the pieces float in a wading pool. A puzzle consists of approximately 15 pieces. The pieces are about 12.7 cm x 18 cm each, and 2.54 cm thick to be conveniently handled in the water. A completed rectangular puzzle is approximately 91 cm long and 30 cm wide (91 x 30 cm). The round ones are 91 cm in diameter. A unique interlocking design allows the puzzle to float indefinitely so it can be left in the pool as a decorative and conversational piece. The technology is available for sale or license for a front-end payment plus a royalty.

### **T11018 — Hand Sander for Large Contours/302**

A hand sander for large contours using roll type sandpaper. This invention is in the design stage only, but engineering drawings, technical descriptions and know-how are available. The hand sander is similar in design to the shape of a hacksaw. It provides its own carrier for roll type sandpaper and by unclamping the outboard lock, more paper may be fed through the device. This allows disposal of the "used" sandpaper by supplanting with new sandpaper from the roll. Licensing rights on a worldwide basis are available.

sion de son lancer. On peut l'utiliser avec des moulinets ouverts ou fermés. Cette commande est disponible séparément ou avec canne à pêche. Le dispositif est fabriqué en plastique moulé et des prototypes sont disponibles. La licence du brevet de fabrication et de commercialisation est disponible aux É.-U. et au Canada.

### **T10750 — Planches à voile: know-how au niveau de la conception et de la fabrication/302**

Le véliplanisme est un sport nouveau qui consiste à se déplacer à la voile, debout. Le dispositif ressemble à une planche de surf à laquelle est attachée une voile. Même par vent très léger la planche à voile procure une sensation de vitesse. Le know-how technique est offert par un véliplaniste d'expérience qui conçoit et fabrique des planches à voiles depuis le tout début de ce sport. Il offre son know-how en matière de conception, de fabrication et d'utilisation aux intéressés. Ce know-how inclut les méthodes de fabrication, la connaissance des caractéristiques des pièces et matériaux et une aide au niveau des ventes, de l'emballage et de la mise en marché. Les connaissances techniques sont mises à la disposition de tous les pays. Les conditions sont négociables pour chaque cas particulier.

### **T10980 — Casse-tête flottants pour piscines et pataugeuses/302**

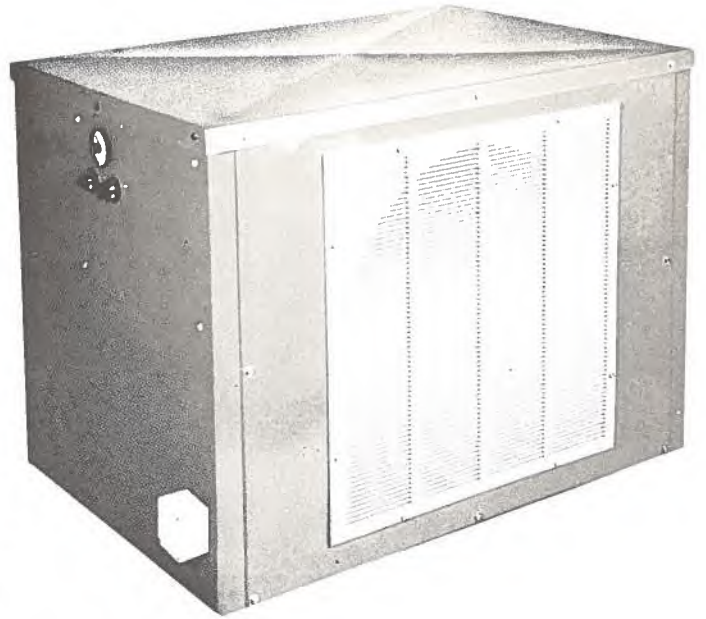
Cette technologie destinée au domaine du jouet et des loisirs est une conception (tous droits de reproduction réservés) concernant des casse-tête pouvant être assemblés dans des piscines ou des pataugeuses. C'est le jouet idéal pour le fanatique des casse-tête qui veut profiter d'une journée chaude et ensoleillée. Un nageur peut par exemple rassembler à la nage les pièces qui jonchent la surface de l'eau pour les assembler. Également, les pièces de deux casse-tête (ou plus) peuvent être lancées pêle-mêle dans la piscine, la victoire revenant au nageur ayant terminé le premier l'assemblage. Les jeunes enfants peuvent s'amuser en assemblant le casse-tête pendant que les pièces flottent dans une pataugeuse. Chaque casse-tête contient environ 15 pièces de 12,7 cm x 18 cm et 2,54 cm d'épaisseur pour faciliter la manipulation dans l'eau. Un casse-tête rectangulaire complet fait environ 91 cm x 30 cm. Les casse-tête circulaires ont 91 cm de diamètre. Un système de liaison original permet au casse-tête de flotter indéfiniment, de sorte qu'il peut être laissé dans la piscine comme décoration ou sujet de conversation. On peut obtenir les droits de vente ou une licence contre versement initial forfaitaire et paiement de redevances.

### **T11018 — Ponceuse manuelle pour grandes surfaces courbes/302**

Il s'agit d'une ponceuse manuelle pour grandes surfaces courbes qui utilise du papier de verre en rouleaux. La présente invention n'est qu'à l'étape de la conception, mais les dessins, descriptions et caractéristiques sont disponibles. La ponceuse ressemble à une scie à métaux. Elle comporte une bobine de papier de verre qui permet de remplacer rapidement la bande usée. Il suffit de débloquer le verrou, de tirer le papier et de jeter la partie usée. Les droits de licence sont disponibles dans le monde entier.

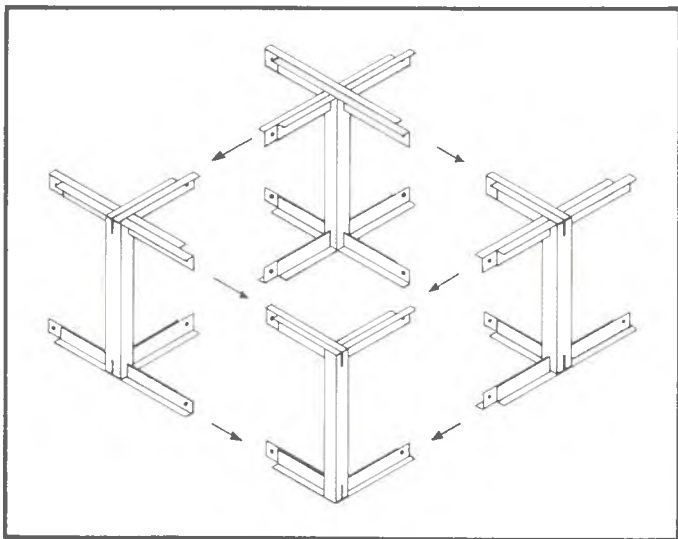


Elevator Control Adapter (See page 4 )  
 Adaptateur pour commandes d'ascenseur ▲  
 (Voir page 4 )



Heatmiser® Heat Pump (See page 5 ) ▲  
 Pompe à chaleur Heatmiser® (Voir page 5 )

Roof-Framing System (See page 4 )  
 Ossatures de toit (Voir page 4 ) ▼

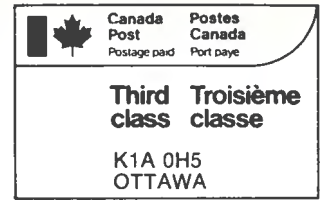


Saunas (See page 5 ) ▼  
 Saunas (Voir page 5 )



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