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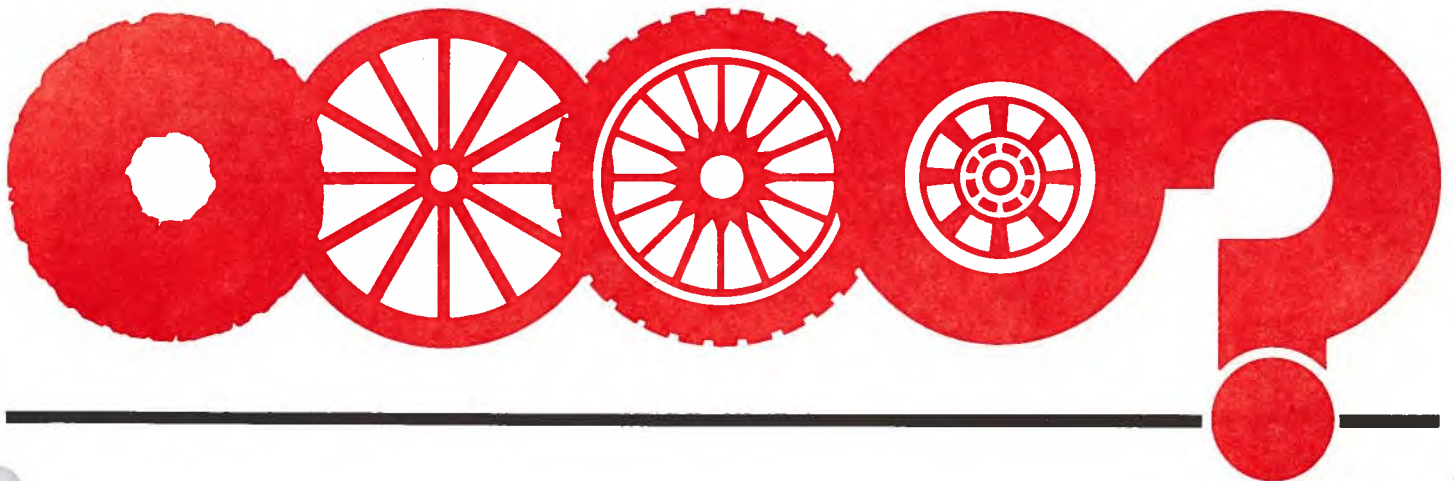
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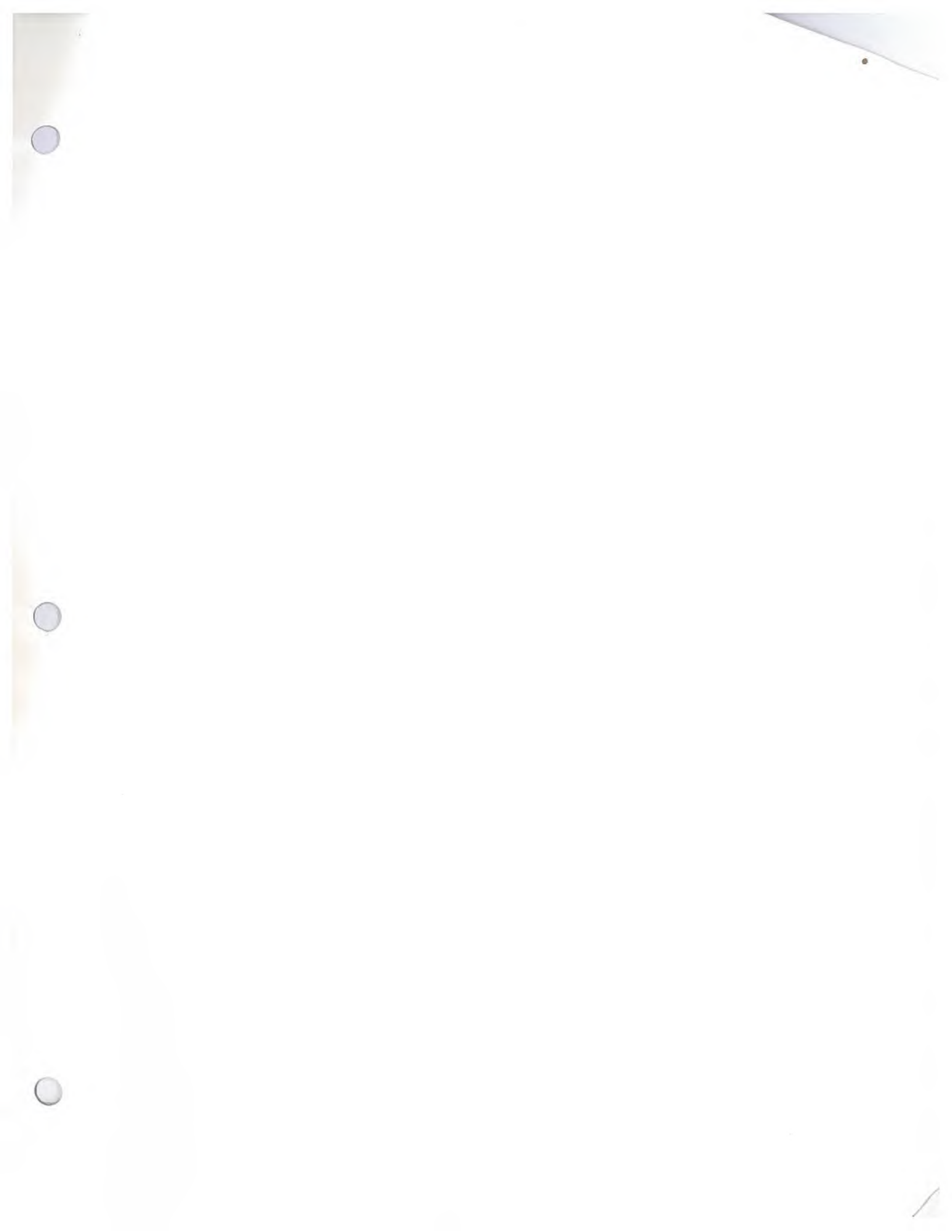
new products bulletin

bulletin de produits nouveaux

333

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new products bulletin

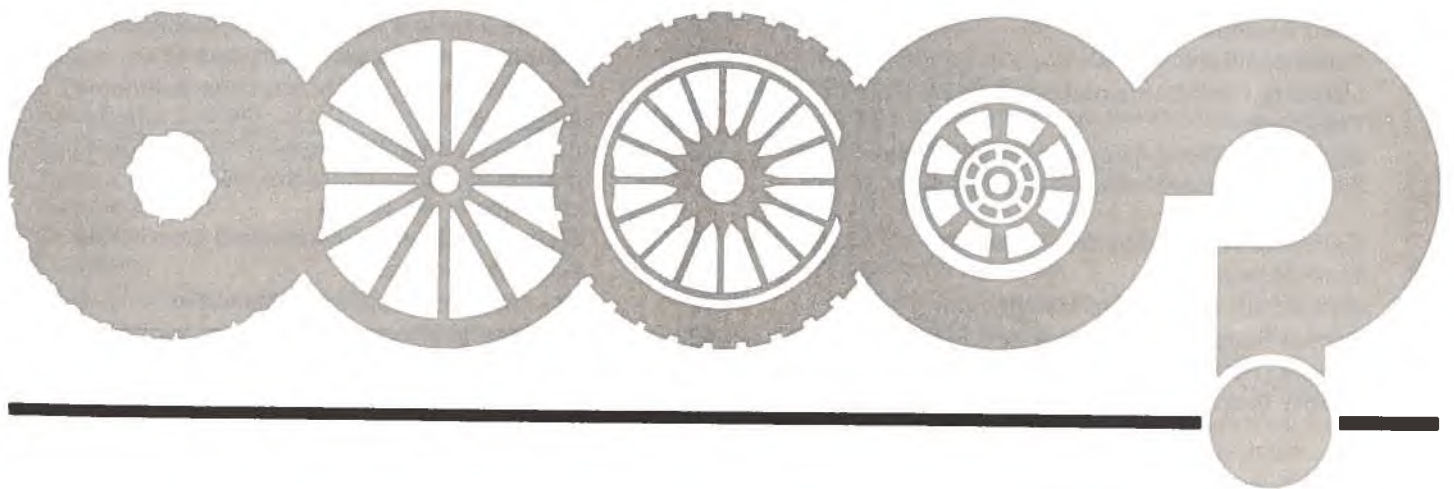
bulletin de produits nouveaux

This 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.

Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5, telephone (613) 995-2235, should be advised of any agreement concluded as a result of this publicity.

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 (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5, téléphone (613) 995-2235, de toute entente intervenue à la suite de la présente publicité.



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Roue à inertie à bagues multiples pour stocker
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Méthode de façonnage et description d'un
produit céramique très résistant à base
d'alumine

Support coulissant pour rotor à
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Méthode et dispositif de refroidissement des
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Principe et méthode de construction d'un
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Selected Licensing or Joint Venture Manufacturing Opportunities

Touch Sensitive Computer Input Device/333

This device, designed to enable non-computer oriented personnel to communicate with computers, uses an array of sequentially pulsed light emitting diodes around the perimeter of a CRT and four light detectors located at its corners. An object, such as a finger, placed on the screen will eclipse the detectors enabling the x,y, coordinates of the object to be calculated by an associated computer program. Write: **Case 6792**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Apparatus for Monitoring Refractive Index Changes in Fluids/333

This is a device in which light is directed into an optical fiber and the portion reflected from the end of the fiber due to the interface between the fiber-end surface and a fluid is measured to determine the refractive index of the fluid. Write: **Case 6970**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Optimising Controller for Solar Energy Collectors/333

A method of controlling fluid flow through a solar energy collector which maintains stable operation even during periods of low intensity or fluctuating sunlight. This method minimizes start-stop cycles of the pump and minimizes the danger of fluid freeze-up in cold weather. Write: **Case 7247**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Hypoallergenic Extracts from Moulds/333

Certain isolated fractions, extracted from allergy-causing moulds, have been found to be antigenic but not allergenic. Such extracted fractions show potential in safely desensi-

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

Périphérique informatique d'entrée commandé par effleurement/333

Ce dispositif permet à des personnes peu familiarisées avec l'informatique d'utiliser des ordinateurs; il comporte une série de diodes électroluminescentes déclenchées séquentiellement et disposées sur le périmètre d'un TRC, ainsi que quatre photodétecteurs situés dans les coins. Un objet, par exemple un doigt, appliqué sur l'écran masque les détecteurs ce qui permet à un programme informatique associé de calculer les coordonnées (x,y) de l'objet sur l'écran. Écrire: **Cas 6792**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Appareil permettant de contrôler les variations d'indice de réfraction dans les liquides/333

Cet appareil permet de déterminer l'indice de réfraction d'un liquide en dirigeant un faisceau lumineux dans une fibre optique, puis en mesurant la portion réfléchie à l'interface constituée par l'extrémité de la fibre et ce liquide. Écrire: **Cas 6970**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Régulateur pour l'optimisation des capteurs solaires/333

Il s'agit d'une méthode de régularisation du débit du fluide dans un capteur solaire qui permet un fonctionnement stable même pendant les périodes d'ensoleillement faible ou variable. Cette méthode réduit au minimum les cycles démarrage-arrêt de la pompe ainsi que les risques de gel du fluide par temps froid. Écrire: **Cas 7247**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Extraits hypoallergènes provenant de moisissures/333

On a constaté que certaines fractions isolées et extraites chez des moisissures allergènes étaient antigéniques mais non allergènes. Ces fractions extraites pourraient servir à

tizing patients allergic to such moulds. Write: **Case 7314**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Single-Sided Applicator for Microwave Heating/333

A compact and versatile microwave applicator designed to seal cartons by momentarily heating a previously applied hot melt or by drying a water based adhesive placed on the carton flaps just prior to sealing. Write: **Case 7340**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Edible Encapsulation of Prophylactic Drugs/333

This invention allows persons wearing protective face masks to carry encapsulated drugs in the mouth, for emergency use if their clothing becomes contaminated with a percutaneously toxic liquid. It has potential for use by personnel, who must remain masked in hostile environments, such as workers with dangerous chemicals, pesticide workers, divers and astronauts. Write: **Case 7519**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Horizontally Expanding Flame Deflector/333

A flame deflecting device designed to retard the spread of fire in a building through open or broken windows. This deflector expands horizontally from a retracted position and is designed for buildings with vertically closely spaced windows. Write: **Case 7624**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Three-Dimensional Imaging Device/333

This compact, low-cost, high speed 3-D device uses triangulation to produce a signal whose amplitude is related only to the geometrical characteristics of the object. It is both fast enough to measure moving objects and versatile

désensibiliser sans danger les sujets allergiques à ces moisissures. Écrire: **Cas 7314**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Applicateur chauffant à micro-ondes/333

Applicateur compact et polyvalent destiné à sceller des cartons par chauffage rapide d'un mélange à chaud préalablement appliqué ou par séchage d'un adhésif à base d'eau appliqué sur les rabats des cartons immédiatement avant le scellage. Écrire: **Cas 7340**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Enrobage comestible pour des médicaments prophylactiques/333

Cette invention permet aux personnes portant un masque protecteur de transporter dans leur bouche un médicament enrobé qu'elles pourront utiliser en cas d'urgence si leurs vêtements devenaient contaminés par un liquide toxique qui agit par voie percutanée. Elle peut être utile aux personnes qui doivent garder leur masque dans un environnement défavorable, comme les travailleurs qui manipulent des produits chimiques dangereux (pesticides, etc.), les plongeurs et les astronautes. Écrire: **Cas 7519**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Déflecteur de flammes à expansion horizontale/333

Déflecteur de flammes destiné à retarder la propagation du feu par des fenêtres ouvertes ou brisées dans un immeuble. Cet appareil se déploie horizontalement à partir d'une position rétractée et est conçu pour des immeubles à fenêtres verticales rapprochées. Écrire: **Cas 7624**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Imageur tridimensionnel/333

Cet appareil 3-D compact, ultra-rapide et peu coûteux génère par triangulation un signal dont l'amplitude dépend seulement des caractéristiques géométriques de l'objet. Il est à la fois assez rapide pour mesurer les objets en mouvement

enough to enable high-speed operation to be sacrificed for higher resolution. Its prime application will be in providing robots with three-dimensional data of any scene, in effect giving them full 3-D vision. Write: **Case 7634**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Hybrid Thyristor-Transistor Pulse Width Modulated Inverter/333

This pulse width modulated inverter employs both thyristors and power transistors to achieve efficient commutation for high power applications. Below a pre-determined load current level, the power transistors operate, and above that level, the thyristors switch on. Applications include variable frequency induction motor drives, uninterruptible power supplies and D.C. choppers for traction drives. Write: **Case 7651**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Magnetometer Array/333

This fluxgate magnetometer employs three sensors, equispaced and individually adjustable, in a linear array. Dynamic adjustment of the end sensors minimizes signal noise and results in increased accuracy of the measurements of the dipole parameters of the observed magnetic anomaly. Write: **Case 7761**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Frequency Compensation Circuit/333

A method and apparatus for rendering a high-voltage current-comparator capacitance bridge insensitive to frequency fluctuations when used for measuring inductances. The basic high accuracy and long-term stability of the bridge are not adversely affected by the additional apparatus. Write: **Case 7763**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

et suffisamment souple pour permettre de sacrifier la vitesse de fonctionnement au profit d'un meilleur pouvoir séparateur. Sa principale application consistera à fournir des données tridimensionnelles de n'importe quelle scène à des robots, ce qui revient en fait à les doter d'une véritable vision tridimensionnelle. Écrire: **Cas 7634**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Inverseur hybride thyristors-transistors à modulation de la durée des impulsions/333

Cet inverseur à modulation de la durée des impulsions utilise des thyristors et des transistors de puissance pour effectuer la commutation dans des applications haute puissance. Les transistors sont en conduction au-dessous d'un seuil de courant prédéterminé, tandis que les thyristors se déclenchent au-dessus de ce seuil. On compte parmi ses applications les dispositifs de commande électrique des moteurs à induction de fréquence variable, les alimentations sans coupure et les circuits découpeurs c.c. pour les entraînements tracteurs. Écrire: **Cas 7651**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Réseau de magnétomètres/333

Ce magnétomètre à grille de flux utilise trois détecteurs équidistants et réglables individuellement, disposés en ligne. Un réglage dynamique des détecteurs placés aux extrémités permet de réduire le bruit au minimum et d'obtenir des mesures plus précises des paramètres du dipôle de l'anomalie magnétique observée. Écrire: **Cas 7761**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Circuit de compensation en fréquence/333

Méthode et dispositif permettant d'insensibiliser aux variations de fréquence pendant les mesures d'inductance un pont de capacités haute tension comparateur de courants. L'addition de ce dispositif n'influe pas sur les caractéristiques fondamentales de haute précision et de stabilité à long terme du pont. Écrire: **Cas 7763**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Phase Meter for the Determination of Complex Index of Refraction of Absorbing Materials/333

This is a device which compensates for the unequal beam attenuation in a double slit, optical null interferometer without changing the relative phases of the two beams. The device is quite simple, achromatic, and it is superior to other conventional techniques used for the same purpose. Write: **Case 7781**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Concentrator and Method for Detection of Amine Vapours/333

A concentrator tube and method of use for obtaining samples of trace quantities of amine vapours in air. The two component concentrator collects the vapours from amines, such as amphetamines, and facilitates easy transfer of the sample to a gas chromatograph for detection. Write: **Case 7790**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Fluid Level Controller/333

The controller is a new and useful improvement for water supply tanks, flushing devices, oil tanks, stock watering tanks and similar liquid holding tanks filled by a float controlled valve. Float adjustment, horizontally and vertically, is set by a single clamping element for convenience and low cost. Write: **Case 7800**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

De-icing Heat Exchanger/333

Heat exchangers used to recover heat from exhaust air are subject to icing while operating at below freezing temperatures. The present invention provides quick and energy efficient means for removing ice accumulated by using downward flared heat exchanger exhaust tubes which let ice fall off when it becomes unstuck during the de-icing period. Write: **Case 7803**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Inno-

Phasemètre pour la détermination de l'indice de réfraction complexe de substances absorbantes/333

Dispositif qui compense le déséquilibre de l'atténuation des faisceaux d'un interféromètre à double fente et à zéro optique sans modifier le déphasage relatif des faisceaux. Le dispositif est relativement simple, achromatique et supérieur aux autres dispositifs classiques employés aux mêmes fins. Écrire: **Cas 7781**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Concentrateur et méthode de détection des vapeurs d'amine/333

Il s'agit d'un tube concentrateur et d'une méthode permettant de prélever des traces de vapeurs d'amine dans l'air. Le concentrateur à deux éléments prélève les vapeurs d'amines, comme les amphétamines, et les transfère facilement dans un chromatographe en phase gazeuse qui sert de détecteur. Écrire: **Cas 7790**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Contrôleur de niveau d'un fluide/333

Ce contrôleur est une amélioration nouvelle et utile pour les réservoirs d'eau, les dispositifs de vidange, les réservoirs d'huile, les réservoirs d'abreuvement du bétail et les contenants à liquides similaires remplis par l'entremise d'une soupape à flotteur. Le réglage horizontal et vertical du flotteur est réalisé à l'aide d'une seule pièce de serrage pour des raisons de commodité et d'économie. Écrire: **Cas 7800**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Échangeur de chaleur à dégivrage/333

Les échangeurs de chaleur utilisés pour récupérer la chaleur contenue dans l'air d'échappement sont sujets au givrage lorsqu'ils fonctionnent à des températures inférieures au point de congélation. La présente invention permet d'éliminer rapidement la glace accumulée, sans grande consommation d'énergie. Elle consiste à munir les échangeurs de tuyaux d'échappement évasés vers le bas et desquels la glace se détachant pendant le dégivrage tombera. Écrire: **Cas 7803**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario)

vation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Heat Pump/333

This is a heat pump, of much simplified construction compared with conventional heat pumps, which is efficient over a wide range of climatic conditions and where problems associated with reverse system operation are eliminated. Write: **Case 7810**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

A DC-AC Conversion Technique using Twin Resonant High Frequency Links/333

It is a DC to low frequency AC conversion technique in which two high frequency (f1, f2) link circuits are used to provide an HF signal (f1 + f2) amplitude modulated at the frequency f1 - f2. The AC signal can then be obtained by straightforward rectification/inversion which is simpler than normally used cyclo-conversion techniques. Write: **Case 7813**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Method for Producing a Catalyst for Oxidizing Carbon Monoxide/333

It is a simple and efficient method for producing a room temperature CO oxidation catalyst with a stannic oxide base and a coating of a catalyst metal. This catalyst could be used in sealed CO₂ lasers to increase gas lifetime and more generally to reduce CO concentration in a confined environment at room temperature. Write: **Case 7824**, Canadian Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Scanning Electron Microscope Sample Cooling/333

This is a cooling device for maintaining a sample at cryogenic temperatures inside the vacuum chamber of a scanning electron microscope. Cryogenic temperatures as low as -190°C. can be maintained. Write: **Case 7886**, Canadian

K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Pompe à chaleur/333

Il s'agit d'une pompe à chaleur de construction beaucoup plus simple que celle des pompes classiques, qui fonctionne efficacement dans une grande gamme de conditions climatiques et qui ne présente pas de problèmes de syphonage. Écrire: **Cas 7810**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Technique de conversion CC-CA au moyen de deux circuits résonants de couplage haute fréquence/333

Il s'agit d'une technique de conversion du courant continu en courant alternatif de basse fréquence qui utilise deux circuits de couplage haute fréquence (f1, f2) pour produire un signal HF (f1 + f2) d'amplitude modulée à la fréquence f1-f2. On peut ensuite obtenir directement le signal CA par redressement/inversion, ce qui est plus simple que les techniques courantes de transformation de cycles. Écrire: **Cas 7813**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Fabrication d'un catalyseur permettant d'oxyder le monoxyde de carbone/333

Il s'agit d'une méthode simple et efficace pour fabriquer un catalyseur, constitué d'une base d'oxyde stannique et d'un revêtement métallique, permettant d'oxyder le monoxyde de carbone à la température ambiante. Ce catalyseur peut être utilisé dans les lasers à CO₂ scellés pour augmenter la durée utile du gaz et, de façon plus générale, pour diminuer la concentration de CO dans un milieu fermé, à la température ambiante. Écrire: **Cas 7824**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Refroidissement des échantillons examinés par microscopie électronique à balayage/333

Ce dispositif de refroidissement maintient l'échantillon à des températures cryogéniques à l'intérieur de l'enceinte sous vide du microscope électronique à balayage. Il permet de maintenir des températures aussi basses que -190°C.

Patents and Development Limited, 275 Slater Street, Ottawa, Ontario K1A 0R3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Plant Nutrient/333

Mexican inventor offers a Canadian company the outright sale of his secret formula for an advanced plant nutrient which has application in agriculture, horticulture, fruit culture and floriculture. For more details please write to: Mr. Rodolfo Agis Bazan, Edif. B-2, Departamento 108, Multifamiliar Juarez, C 01, Roma Sur, Mexico City 7, D.F., Mexico and send copy of your initial correspondence to Canadian Embassy, Apartado Postal 105-05, Mexico, 5 D.F., Mexico.

Modular Wood Construction System/333

Canadian inventors are offering a Canadian company the manufacturing and marketing rights to a construction system using prefabricated wood units. This system gives the walls of a building greater resistance to the cold through the use of thick insulation between the inner and outer walls. The inventors claim that Modules B&L offer the following advantages: ease of assembly, a flexible system, an unlimited choice of finishes, easy installation of services and simpler maintenance. (See illustration page 35.) Write to: Les Modules B&L Inc, 23 des Sources, Gatineau, Quebec J8V 1C7 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

3-D Weaving Process/333

A French company, a leader in the European aerospace industry, offers through licensing arrangements a process or processes involving the automated manufacture of articles made of multidirectional composites ("composite" means material consisting of a fibrous reinforcement and an organic or mineral matrix; "multidirectional" means that these fibrous reinforcing elements are arranged in more than two directions). The proposal is for a process for the automated manufacture of three-dimensional reinforcing elements (3-D substratum) using, without prior processing, fibres commonly employed by the weaving industry (carbon, glass, silica, silicon carbide, aramides, nylon and so on). This process, developed for the requirements of the aerospace industry, is applicable to other fields requiring mass production, mainly structural parts subjected to strong thermal or mechanical forces (ovens, motors, tubes, medical prostheses and so on). Write to: Mr. Bernard Vivier, Société nationale industrielle aérospatiale, BP 11, 33165 St Médard en Jalles, Cédex (France) and send a copy of your initial correspondence to the Canadian Embassy, 35, avenue Montaigne, 75008 Paris (France).

Écrire: **Cas 7886**, Société canadienne des brevets et d'exploitation limitée, 275, rue Slater, Ottawa (Ontario) K1A 0R3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Aliment pour plantes/333

Un inventeur mexicain offre de vendre à forfait à une entreprise canadienne sa formule secrète pour un aliment perfectionné pour les plantes ayant des applications dans les domaines de l'agriculture, de l'horticulture, de la fruiticulture et de la floriculture. Pour plus de détails, il faut écrire à: M. Rodolfo Agis Bazan, Edif. B-2, Departamento 108, Multifamiliar Juarez, C 01, Roma Sur, Mexico City 7, D.F. (Mexique) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Apartado Postal 105-05, Mexico, 5 D.F. (Mexique).

Système de construction modulaire en bois/333

Des inventeurs canadiens offrent à une compagnie canadienne les droits de fabrication et de commercialisation d'un système de construction à l'aide d'unités préfabriquées en bois. Ce système permet de donner aux murs d'un édifice une résistance au froid des plus élevée grâce à une épaisse matière isolante entre les parois intérieures et extérieures. Les Modules B&L offrent les avantages suivants: Un assemblage facile; un système flexible; un choix de finis illimité; une installation aisée des services; et un entretien des plus simple. (Voir l'illustration page 35.) Écrire à: Les Modules B&L Inc., 23, des Sources, Gatineau (Québec) J8V 1C7 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Procédé 3D de tissage/333

Une firme française, chef de file de l'industrie aérospatiale européenne, offre une vente de licence de(s) procédé(s) relatif à la réalisation automatisée d'objets en composites multidirectionnels (composite signifie matériau composé d'un renfort fibreux et d'une matrice organique ou minérale; multidirectionnel signifie que ces renforts fibreux sont disposés au delà de deux directions). On propose un procédé permettant la réalisation automatique de renforts tridimensionnels (substrat 3D) et utilisant sans aucune transformation préalable les fibres communément utilisées par les industriels du tissage (carbone, verre, silice, carbure de silicium, aramide, nylon, etc.). Ce procédé, développé pour les besoins de l'industrie aéronautique, voit s'ouvrir d'autres domaines nécessitant de grandes séries, principalement, pièces structurales soumises à de fortes sollicitations thermiques ou mécaniques (fours, moteurs, tubes, prothèses médicales, etc.). Écrire à: M. Bernard Vivier, Société nationale industrielle aérospatiale, B.P. 11, 33165 St. Médard en Jalles, Cédex (France) et faire parvenir copie de votre correspondance initiale à l'Ambassade du Canada, 35, avenue Montaigne, 75008 Paris (France).

Materials Handling Equipment/333

British firm offers a Canadian company with metal fabrication facilities, the manufacturing and marketing rights, under licence in Canada, to its complete range of materials handling equipment for bulk materials for use in food, chemicals, pharmaceutical and plastics industries. The Rolabelt range is a unique flexible troughed belt conveyor, capable of negotiating tight turns and steep inclines and discharges bulk materials at any predetermined point with greater flexibility in installation than conventional conveyors. The prospective Canadian company should have mechanical and electrical engineering experience. (See illustration page 35.) Write: Mr. M.J. PODEVYN, Director, Spiroflow U.K. (Machinery) Ltd., P.O. Box 7, Clitheroe, Lancs. BB7 1JS England and send a copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London, W1X 0AB, England.

Rubber Recycling Technology/333

British inventor offers a Canadian company the manufacturing rights to a technology for recycling used auto tires by converting them into a bitumen-like product and at the same time separating the steel and fabric reinforcement. Tests at the University of Munich have shown that the product can be used for the partial substitution of bitumen in road making asphalt. Indications are that the product can also be used for waterproofing paints, roofing felts and auto body underseal. Write: Mr. Derek Rowlands, Ray House, Sea Road, Westgate, Kent CT8 8QA, England and send copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Christmas Tree or Pole Stand/333

A Canadian inventor offers to a Canadian company the manufacturing rights in Canada and worldwide marketing and export rights for his new AVA stand, a completely redesigned christmas tree stand with year round, multi-use possibilities, such as artificial trees, decorative trees, artificial greenery, plants table stand, sign post stand, flag stand and flower pot. It measures 255mm x 460mm and weighs 2kg. It is specially designed for immediate automatic adjustment when inserting a tree or pole for an upright and secure position by one person. The AVA stand will not rust or scratch any floor surface. (See illustration page 35.) Write: Mr. Jerry Stephens, President, AVA Tech International Ltd., P.O. Box 3976, Station "C", Ottawa, Ontario K1Y 4P2 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Matériel de manutention des matériaux/333

Une firme britannique offre à une société canadienne ayant des installations de fabrication métallique les droits de fabrication et de mise en marché, sous licence au Canada, de sa gamme complète de matériel de manutention des matériaux en vrac pour l'industrie alimentaire, chimique, pharmaceutique et plastique. Le matériel Rolabelt est un convoyeur à bande spécial en forme d'auge pouvant négocier des virages serrés et des pentes raides pour déverser des matériaux en vrac en n'importe quel point prédéterminé grâce à sa plus grande souplesse de montage que les convoyeurs classiques. La société canadienne intéressée devrait avoir de l'expérience en génie électrique et mécanique. (Voir l'illustration page 35.) Écrire à: M. M.J. PODEVYN, Directeur, Spiroflow U.K. (Machinery) Ltd., P.O. Box 7, Clitheroe, Lancashire, BB7 1JS (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-Commissariat du Canada, One Grosvenor Square, Londres W1X 0AB (Angleterre).

Recyclage du caoutchouc/333

Un inventeur britannique offre à une entreprise canadienne les droits de fabrication touchant une technique de recyclage de vieux pneus d'automobiles qui permet d'obtenir un produit de genre bitumineux tout en le séparant de l'acier et de la toile de renfort. Des tests effectués à l'université de Munich indiquent que ce produit peut remplacer partiellement le bitume dans l'asphalte de revêtement des chaussées. Il semble également qu'il soit utilisable dans les peintures hydrofuges, les feutres de toitures et les antirouilles de carrosseries automobiles. Écrire à: M. Derek Rowlands, Ray House, Sea Road, Westgate, Kent CT8 8QA (Angleterre) et faire parvenir une copie de votre correspondance initiale à la Division commerciale, Haut-Commissariat du Canada, One Grosvenor Square, Londres W1X 0AB (Angleterre).

Support d'arbre de Noël/333

Un inventeur canadien offre à une société canadienne les droits de fabrication, au Canada, de son nouveau produit, le support AVA, ainsi que les droits d'exportation et de commercialisation mondiales qui s'y rapportent. Le support destiné aux arbres de Noël est d'un dessin entièrement nouveau et peut servir toute l'année à une multitude d'usages: arbres artificiels ou décoratifs, plantes artificielles, support de table pour plantes, supports de panneau signalisateur, de mât pour drapeau et pot de fleur. Le support mesure 255 mm x 460 mm et pèse 2 kg. Il est spécialement étudié pour bloquer automatiquement, immédiatement et en toute sécurité, un arbre ou poteau installé par une seule personne. Le support AVA ne rouille pas et ne raye pas les planchers. (Voir l'illustration page 35.) Écrire à: M. Jerry Stephens, président, AVA Tech International Ltd., B.P. 3976, succursale "C", Ottawa (Ontario) K1Y 4P2 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, Ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Fluid Balanced Oil Pump/333

Australian firm is offering for manufacturing in Canada through a joint venture and licensing agreement a fluid balanced oil pump. The pump uses a system of interconnected pistons and foot valves to utilise fluid pumped down the hole to operate both the suction and return strokes. Losses are restricted to friction losses and hence efficiency is expected to be high. With every gallon pumped down the hole 2 gallons are pumped up and the potential energy of the pumping fluid is not lost. The pumping range is up to 250 bls per day based on minimal depth limitations. Write: Mr. John Guilfoyle, Midas Finance Corporation, 317 Rockerby Road, Subiaco, Western Australia and send a copy of your initial correspondence to the Canadian Consulate General, 160 St. George's Terrace, 7th Floor, G.P.O. Box R1287, Perth, Western Australia 6000.

Toilet Sanitizer/333

A Canadian inventor offers to a Canadian manufacturer the licensing and/or patent rights for the manufacture of combination water saver and toilet bowl disinfectant dispenser which is a permanent fixture attached in the tanks of toilets to automatically disinfect both the tank and the toilet bowl at each flush. The system discharges a germicide into the tank and the bowl. The germicide is a chlorine base chemical made in compressed form as a stick or cake. A refill is required once in four months. Write: Mr. Marius H. Syrenne, President, M. Syrenne & Sons Manufacturing Limited, 1604 - 9th Avenue North, Saskatoon, Saskatchewan S7K 3A1 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Integrated Self-Containerized Building System/333

A Greek firm offers the manufacturing rights through a licensing agreement to an Integrated Self-containerized Building System designed for a wide range of temporary and semi-permanent structures. Basic elements of hexagonal form are easily assembled and dismantled. Structures form international standardized containers thereby cutting down on cost of transportation. Principal fields of application are disaster planning, emergency shelters, hospitals, schools and other relief facilities, touristic developments, construction and labour camps, bridges, domes and cable systems. The system is also an alternative to existing prefabricated housing systems. Write to: Mrs. Ingrid Spendlingwimmer-Fragantoni, 28 Lykabettous & Tsakalof, Athens 136, Greece and send a copy of your initial correspondence to Canadian Embassy, 4 Ioannou Ghennadiou Street, Athens 115, 21, Greece.

Pompe à huile à équilibrage hydraulique/333

Une firme australienne voudrait s'associer à une firme canadienne et conclure une entente de fabrication sous licence au Canada d'une pompe à huile à équilibrage hydraulique. La pompe comprend un ensemble de pistons et de clapets de pied reliés entre eux qui utilise le liquide pompé dans le trou pour effectuer les courses d'aspiration et de retour. Les pertes se limitent à celles causées par le frottement, et on prétend par conséquent que le rendement de la pompe est élevé. Pour chaque gallon de liquide pompé dans le trou, on aspire 2 gallons de liquide, et l'énergie potentielle du liquide de pompage est conservée. La pompe peut débiter jusqu'à 250 barils par jour pour des profondeurs minimales. Écrire à: M. John Guilfoyle, Midas Finance Corporation, 317 Rockerby Road, Subiaco (Australie-Occidentale) et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 160 St. George's Terrace, 7th Floor, G.P.O. Box R1287, Perth (Australie-Occidentale) 6000.

Distributeur de désinfectant pour W.C./333

Un inventeur canadien offre à une entreprise canadienne les droits de licence ou de brevet pour la fabrication d'un produit permettant d'économiser de l'eau et de désinfecter les W.C. Il s'agit d'un appareil fixé en permanence au réservoir qui désinfecte automatiquement le réservoir et la cuvette à chaque chasse d'eau en libérant une certaine quantité de germicide. Ce germicide est un produit chimique à base de chlore comprimé sous forme de bâton ou de pain; il doit être remplacé aux quatre mois. Écrire à: M. Marius H. Syrenne, président, M. Syrenne & Sons Manufacturing Limited, 1604, 9th Avenue North, Saskatoon (Saskatchewan) S7K 3A1 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Système intégré de construction autonome/333

Une entreprise grecque offre, par le biais d'un contrat de licence, les droits de fabrication d'un système intégré de construction autonome destiné à l'érection d'une vaste gamme d'ouvrages temporaires et semi-permanents. D'une forme hexagonale, les éléments de base sont faciles à assembler et à démonter. Les structures forment des conteneurs internationalement normalisés permettant de réduire les frais de transport. Le système peut être utilisé à des fins diverses: mesures d'urgence, abris temporaires, hôpitaux, écoles et autres installations de secours, aménagements touristiques, chantiers de construction, ponts, assemblages géodésiques. Il peut également offrir une solution de rechange à la construction domiciliaire préfabriquée. Écrire à: M^{me} Ingrid Spendlingwimmer-Fragantoni, 28 Lykabettous & Tsakalof, Athènes 136 (Grèce) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, 4, rue Ioannou Ghennadiou, Athènes 115, 21 (Grèce).

Fluid Relay/333

Canadian firm offers the manufacturing and marketing rights, technical know-how and sales/marketing expertise to a Canadian manufacturer through joint venture arrangements for an electrical relay apparatus of which the moving contact(s) is (are) an electrically conductive fluid moved by an outer fluid, the latter being a magnetically susceptible fluid. Some key advantages of the fluid relay compared to and over solid state and electromechanical switching devices are said to be a relatively low cost, a high degree of reliability, a high current carrying and switching capability, virtually nonexistent contact(s) wear, ease of use in digital circuits such as TTL and no mechanical wear. Write to: Mr. Daniel J.M. Guibord, Guibord Research and Development Laboratory Inc., P.O. Box 392, Place d'Armes, Montreal, P.Q. H2Y 3H1 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Slitting and Cut-to-length Lines and Pipe Facing, Testing, Threading and Bundling/333

Austrian manufacturer offers the Canadian manufacturing rights to slitting lines, cut-to-length lines, profiling mills, pipe welding mills, machines for pipe facing, pipe threading, pipe testing and pipe profile bundling. A principal of the company may be contacted in Toronto on May 23 to 26, 1984 (call Austrian Trade Commission (416) 967-3348) and in Montreal on May 28 to 30, 1984 (call Austrian Trade Commission (514) 849-3709) or Write: Mr. Pernsteiner, Kagerer Ges.m.b.H., Ignaz Mayer Strasse 7, A-4020 Linz, Austria and send a copy of your initial correspondence to Canadian Embassy, Luegerring 10, A-1010 Vienna, Austria.

Carts, Trolleys and Pellet Containers/333

Austrian manufacturer offers the Canadian manufacturing rights to carts, trolleys and pellet containers as well as special containers for the meat, baking, dry cleaning and clothing industry. A principal of the company may be contacted in Toronto on May 23 to 26, 1984 (call Austrian Trade Commission (416) 967-3348) and in Montreal on May 28 to 30, 1984 (call Austrian Trade Commission (514) 849-3708) or write: Mr. Pernsteiner, Kagerer Ges.m.b.H., Ignaz Mayer Strasse 7, A-4020 Linz, Austria and send a copy of your initial correspondence to Canadian Embassy, Luegerring 10, A-1010 Vienna, Austria.

Steel Mousetrap/333

Canadian firm offers to a Canadian company the manufacturing, marketing and export rights to a new mousetrap

Relais à fluide/333

Une société canadienne offre à un fabricant canadien, via des accords d'association commerciale, les droits de fabrication et de commercialisation, son savoir-faire technique et son expérience dans les domaines de la vente et de la commercialisation, pour un relais électrique dont le ou les contacts sont formés par un fluide conducteur que déplace un fluide extérieur, ce dernier comportant des caractéristiques de susceptibilité magnétique. On affirme compter parmi les avantages de ce relais à fluide par rapport aux dispositifs de commutation électromécaniques et à semiconducteurs un coût relativement faible, une grande fiabilité, des capacités de commutation et de charge de courant élevées, l'usure pour ainsi dire nulle des contacts, la facilité d'utilisation dans les circuits logiques comme, par exemple, ceux du type TTL, et aucune usure mécanique. Écrire à: M. Daniel J.M. Guibord, Guibord Research and Development Laboratory Incorporée, B.P. 392, Places d'Armes, Montréal (Québec) H2Y 3H1 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Découpeuse longitudinale et à longueur, machines à surfacer, fileter, vérifier et emballer les tuyaux/333

Un fabricant autrichien offre à un fabricant canadien les droits de manufacture de découpeuse longitudinale de feuillard, découpeuse de feuillard à longueur voulue, de machine à profiler, de machine à souder les tuyaux, de machine à surfacer, fileter, vérifier et emballer les tuyaux. On peut contacter un représentant de la compagnie à Toronto du 23 au 26 mai 1984 (appeler le conseiller commercial d'Autriche (416) 967-3348) et à Montréal du 28 au 30 mai 1984 (appeler le conseiller commercial d'Autriche (514) 849-3709) ou écrire à: M. Pernsteiner, Kagerer Ges.m.b.H., Ignaz Mayer Strasse 7, A-4020 Linz (Autriche) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Luegerring 10, A-1010 Vienne (Autriche).

Chariots, diables et conteneurs de palette/333

Un fabricant autrichien offre les droits canadiens de fabrication de chariots, diables et conteneurs de palette ainsi que de conteneurs spéciaux pour l'industrie de la viande, du vêtement, du nettoyage à sec et de la cuisson au four. On peut contacter un représentant de la compagnie à Toronto du 23 au 26 mai 1984 (appeler le conseiller commercial d'Autriche (416) 967-3348) et à Montréal du 28 au 30 mai 1984 (appeler le conseiller commercial d'Autriche (514) 849-3708) ou écrire à: M. Pernsteiner, Kagerer Ges.m.b.H., Ignaz Mayer Strasse 7, A-4020 Linz (Autriche) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Luegerring 10, A-1010 Vienne (Autriche).

Souricière tout acier/333

Une société canadienne offre à une compagnie canadienne les droits de fabrication, de commercialisation et d'export

manufactured entirely from steel. Write: Mr. J.L. Eckebrecht, President, Lomar Associates, 1384 Tyandaga Park Drive, Burlington, Ontario L7P 1N3 and send a copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Product for Automotive Manufacturing/333

United States manufacturer offers the manufacturing and marketing rights in Canada through a licensing agreement or joint venture arrangements for a product used in automotive manufacturing. Write: Mr. A.J. Paradise, President, CHEMSECO, 4800 Blue Parkway, Kansas City, Missouri 64130-2880 and send a copy of your initial correspondence to Canadian Consulate General, 310 South Michigan Avenue, 12th Floor, Chicago, Illinois 60604-4295.

School Supplies, Equipment and Furniture/333

Austrian company offers under licensing or joint venture arrangements the manufacturing rights for Canada and other countries for school supplies, equipment and furniture such as educational boards, charts, maps for all subjects, projection screens, school furniture and parts, furniture fittings, etc. A principal of the company will be in Toronto on May 23 to 26, 1984 (contact the Austrian Trade Commission (416) 967-3348) and in Montreal on May 28 to 30, 1984 (contact the Austrian Trade Commission (514) 849-3708) or write: Paul SAPPL, Kaiserbach 43, A-6332 Kufstein, Austria and send a copy of your initial correspondence to Canadian Embassy, Luegerring 10, A-1010 Vienna, Austria.

Skilifts (T-bar), Chairlifts and other Lifts/333

An Austrian company offers through a licensing agreement the manufacturing rights for Eastern Canada and the Eastern United States for their skilifts (T-bar), chairlifts and other lifts (aerial ropeways, etc.). A representative of the company will be in Toronto on May 23 to 26, 1984 (contact the Austrian Trade Commission (416) 967-3348) and in Montreal on May 28 to 30, 1984 (contact the Austrian Trade Commission (514) 849-3708) or write: SWOBODA, Schloss Oberweis, A-4664 Oberweis, Austria and send a copy of your initial correspondence to Canadian Embassy, Luegerring 10, A-1010 Vienna, Austria.

tation d'une nouvelle souicière tout acier. Écrire à: M. J.L. Eckebrecht, Président, Lomar Associés, 1384 Tyandaga Park Drive, Burlington (Ontario) L7P 1N3 et faire parvenir une copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Produit pour l'industrie automobile/333

Un manufacturier américain offre à une firme canadienne les droits de fabrication et de mise en marché sous licence ou en participation d'un produit utilisé dans l'industrie automobile. Écrire à: M. A.J. Paradise, Président, CHEMSECO, 4800 Blue Parkway, Kansas City (Missouri) 64130-2880, et faire parvenir une copie de votre correspondance initiale au Consulat général du Canada, 310 South Michigan Avenue, 12th Floor, Chicago (Illinois) 60604-4295.

Matériel, équipement et mobilier scolaires/333

Une société autrichienne offre, sous licence ou en entreprise conjointe, les droits de fabrication au Canada et à l'étranger, de matériel, d'équipement et de mobilier scolaires tels que tableaux, diagrammes et cartes touchant les sujets, écrans de projection, meubles, accessoires divers, etc. Un représentant de la société sera à Toronto du 23 au 26 mai 1984 (téléphoner à la délégation commerciale d'Autriche (416) 967-3348) et à Montréal du 28 au 30 mai 1984 (téléphoner à la délégation commerciale autrichienne (514) 849-3708) ou écrire à: Paul SAPPL, Kaiserbach 43, A-6332 Kufstein (Autriche) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Luegerring 10, A-1010 Vienne (Autriche).

Remonte-pentes, télésièges et autres/333

Une société autrichienne propose les droits de fabrication sous licence de ses remonte-pentes, télésièges et autre équipement semblable (câbles aériens, etc. . .), pour l'Est du Canada et des États-Unis. Un représentant de la société sera à Toronto du 23 au 26 mai 1984 (prendre contact avec la Mission commerciale autrichienne (416) 967-3348) et à Montréal du 28 au 30 mai 1984 (prendre contact avec la délégation commerciale autrichienne (514) 849-3708) ou écrire à: SWOBODA, Schloss Oberweis, A-4664 Oberweis (Autriche) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Luegerring 10, A-1010 Vienne (Autriche).

Timber Beams (girders) for Formwork/333

Austrian company offers under licensing or joint venture arrangements the manufacturing rights for Canada and USA for timber beams (girders) for formwork. The product is light weight, it can easily be cut on the building site and it costs less than beams made of other materials. A representative of the company will be in Toronto on May 23 to 26, 1984 (contact the Austrian Trade Commission (416) 967-3348) and in Montreal on May 28 to 30, 1984 (contact the Austrian Trade Commission (514) 849-3708) or write: Kaufmann GmbH, A-6870 Reuthe bei Bezau, Austria and send a copy of your initial correspondence to Canadian Embassy, Luegerring 10, A-1010 Vienna, Austria.

Poutres de bois pour coffrages/333

Une société autrichienne offre, sous licence ou en entreprise conjointe, les droits de fabrication, au Canada et aux États-Unis, de poutres de bois (solives) pour coffrages. Il s'agit d'un produit léger qui peut être facilement coupé sur le chantier et qui coûte moins cher que les poutres faites en autres matériaux. Un représentant de la société sera à Toronto du 23 au 26 mai 1984 (téléphoner à la délégation commerciale d'Autriche (416) 967-3348) et à Montréal du 28 au 30 mai 1984 (téléphoner à la délégation commerciale autrichienne (514) 849-3708) ou écrire à: Kaufmann GmbH, A-6870 Reuthe bei Bezau (Autriche) et faire parvenir une copie de votre correspondance initiale à l'Ambassade du Canada, Luegerring 10, A-1010 Vienne (Autriche).

Recently Issued Canadian Patents Available for Licensing or Sale in Canada

Note:

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

Apparatus for Sterilizing Flowable Food Products by Electro-Magnetic Radiations/333

There are disclosed a process and an apparatus for pasteurizing and/or sterilizing food products by exposing the latter to electro-magnetic radiations, namely: infra-red radiation for pasteurization and ultra-violet radiations for sterilization. The apparatus enables continuous treatment of the food products. Write: **PATENT 1,159,705**, René A. Marinoza, 8220 - 8th Avenue, St. François, Laval, Quebec H7A 1H1 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Sound Damper for a Mixing Valve/333

A sound damper in a mixing valve of the type comprising a valve body, a stationary ceramic disc located in a seat in the body and having inlets for hot and cold water and an outlet for mixed water, a moving ceramic disc having an opening which cooperates with the openings of the stationary disc for the control of the flows of cold and hot water, a plastic piece being fixed on top of the moving disc and a recess in the lower surface of the plastic piece forming, together with the moving disc, a flow chamber for water. Sound attenuation is achieved in a simple manner by providing at the lower surface of the plastic piece ribs which are integral with it and extend, mutually parallel and mainly in planes normal to the moving disc, in the flow direction of water, the ribs partly extending, at the opening of the moving disc, down substantially as far as the interface between the moving disc and the stationary disc. Write: **PATENT 1,159,745**, Oras Oy, Rauhankatu 28, SF-26100, Rauna 10, Finland and send copy of your initial correspondence to Canadian Embassy, Pohjois Espanadi 25B, 00100 Helsinki 10, Finland.

Heat Exchange Element/333

A heat exchange element for condensers contacted with cooling gas, preferably air, with at least two pipes, situated one after another in the cooling gas current and flowed through parallel by the operation means, which have a preferably circular cross section and are provided with crossribs for enlargement of the heat exchange surface. In order to attain, over a large output area of the condenser, only slight pressure differences between the outlet-sided ends of the pipes located consecutively in the cooling gas stream, the ratio of the outer heat transfer surfaces, formed by the surfaces of the crossribs and the pipe, to the diameter of the pipe first contacted with the cooling gas is, on the one hand, chosen smaller in relation to the ratio of the outer heat transfer surface to the diameter of the pipe each of subsequently contacted with the cooling gas and, on the other hand, the flow cross section of this pipe subsequently contacted with the cooling gas is chosen smaller in relation to the flow cross section of the pipe always previously contacted with the cooling gas. Preferably, at least two pipes, formed with circular yet different-sized flow cross sections, are ribbed with crossribs of equal outer dimensions and equal division. Write: **PATENT 1,159,819**, Balcke-Dürr Aktiengesellschaft, Homberger Strasse 2, 4030, Ratingen 1, Germany and send copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, D-4000 Duesseldorf, West Germany.

Beer Keg Scale/333

A weighing and supporting device for liquid container kegs, such as those for beer. The device comprises a flat, keg-receiving platform beneath which is located a weight scale, the platform being pivotable between as inclined, dispensing position and a horizontal, weighing position. In the latter, the platform rests upon the scale and is free to move up and down on that scale to enable the platform and a keg supported thereon to be weighed. By taking periodic measurements of the weight of the keg supported on such a device, the need for a liquid metering device in the line of liquid flow from the keg is avoided.

Brevets canadiens récemment émis pour octroi de licences ou vente au Canada

Note:

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

Dispositif de stérilisation de produits alimentaires coulants par passage dans un champ électromagnétique/333

Dispositif d'insonorisation pour robinet mélangeur/333

Élément échangeur de chaleur/333

Bascule pour tonneaux de bière/333

Write: **PATENT 1,159,855**, Frank A. Kapounek, 103 Glamorgan Drive, Kanata, Ontario K2L 1R5; Stephen A. Blok, P.O. Box 1172, Pembroke, Ontario K8A 6Y6 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Internal Combustion Engine/333

Moteur à combustion interne/333

A spark-ignition engine has self-adaptive adjustment of the size of its fuel rations in dependence on misfires in the engine. A misfire is identified as an abnormal deficiency in energy conversion, this being detected by means of a mechanical energy discriminator which compares the quanta of energy derived from different combustion cycles. When a misfire in a particular cylinder is identified, the fuel rations to that particular cylinder are automatically increased. Overall increase of fuel rations is counteracted by gradually decreasing the fuel rations of cylinders when they are firing regularly and not producing deficient quanta of energy. In the preferred embodiment each cylinder has its own fuel injector valve. The valve is normally closed, being opened for a short interval of time during each cylinder cycle. The size of a fuel ration is regulated by varying the duration of opening of the valve. Electrical simulation of engine dynamics allows detection of misfires over a wide range of engine speeds and air intake pressures. Write: **PATENT 1,159,928**, Donald K. Coles, 2505 Capital Avenue, Fort Wayne, Indiana and send copy of your initial correspondence to Canadian Consulate General, 1920 First Federal Building, 1001 Woodward Avenue, Detroit, Michigan 48226-1966, U.S.A.

Catalytic Cartridge SO₃ Decomposer/333

Cartouches catalytiques pour la décomposition au SO₃/333

A catalytic cartridge surrounding a heat pipe driven by a heat source is utilized as a SO₃ decomposer for thermochemical hydrogen production. The cartridge has two embodiments, a cross-flow cartridge and an axial flow cartridge. In the cross-flow cartridge, SO₃ gas is flowed through a chamber and incident normally to a catalyst coated tube extending through the chamber, the catalyst coated tube surrounding the heat pipe. In the axial-flow cartridge, SO₃ gas is flowed through the annular space between concentric inner and outer cylindrical walls, the inner cylindrical wall being coated by a catalyst and surrounding the heat pipe. The modular cartridge decomposer provides high thermal efficiency, high conversion efficiency, and increased safety. Write: **PATENT 1,160,021**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, Pennsylvania 19102-1366, U.S.A.

Method for the Recovery of Valuable Metals from Finely-Divided Pyrite/333

Méthode de séparation des éléments métalliques utiles de la pyrite broyée/333

A process for the recovery of metal values from impure finely-divided pyrite either directly or by first smelting the pyrite with the aid of non-oxidizing gases at an elevated temperature in order to produce an iron matte with a valuable-metal content and dusty gases is disclosed wherein a) part of the pyrite or iron matte which contains valuable metals is first subjected to an oxidizing roasting and thereafter, together with the remainder of the pyrite or iron matte, to a sulfatizing roasting in order to convert the valuable metals present in the pyrite and its roasting residue or in the iron matte to a sulfate form and the iron to an oxide form, whereafter the sulfates are leached and the obtained solution is separated in order to recover the valuable metals from the solution, and the insoluble iron oxide is used for iron production; b) the dusts which contain valuable metals are separated from the gases; c) the separated dusts are fed directly to the sulfatizing roasting of step a) after any arsenic present therein has first been removed; or the separated dusts are directed to a separate sulfatizing roasting in order to convert the valuable metals to sulfate form and the iron to oxide form, whereafter the sulfates are leached in accordance with step a) and the insoluble, arsenic-bearing iron oxide is rejected; and d) the sulfur is condensed from the gases. Write: **PATENT 1,160,055**, Outokumpu Oy, Töölönkatu 4, SF-00100, Helsinki 10, Finland and send copy of your initial correspondence to Canadian Embassy, Pohjois Esplanadi 25B, 00100 Helsinki 10, Finland.

Method and Apparatus for Sealing a Lamina Onto a Plastic Bag/333

Dispositif et méthode de pose d'une bande de scellement sur un sac plastique/333

Aluminum laminae are heat-sealed onto the inside of flat-bottomed plastic bags so that, by bending the lamina double after the bag has been cut open to remove part of its contents, the bag can be reclosed. The apparatus for sealing the laminae on can be incorporated in an existing bag-filling installation. An aluminum strip is supplied to a punching device from a supply roll. A punched-out aluminum lamina is placed upon the upper part of a conveyor lever. The lever is rotated through 180° so that the aluminum lamina to be sealed on comes to be positioned between two layers of a web of plastic material fed by rollers. The ends of the lever are preheated by heating elements in order to accelerate the sealing-on operation. The aluminum lamina is heat-sealed onto the inside of the folded web in such a way that the longer edges of the lamina form an angle of about 45° with the flat bottom of the bag. The rate of production of the existing filling installation can be maintained despite incorporation of the sealing-on apparatus. Write: **PATENT 1,160,090**, Ivers-Lee AG, Kirchbergstrasse 160, 3400 Burgdorf (Canton of Berne), Switzerland and send copy of your initial correspondence to Canadian Embassy, Kirchenfeldstrasse 88, CH-3005 Berne, Switzerland.

Downhole Steam Generator with Improved Preheating/Cooling Features/333

Générateur de vapeur à fond de forage à caractéristiques de préchauffe et de refroidissement plus efficaces/333

An apparatus for downhole steam generation employing dual-stage preheaters for liquid fuel and for the water. A first heat exchange jacket for the fuel surrounds the fuel/oxidant mixing section of the combustor assembly downstream of the fuel nozzle and contacts the top of the combustor unit of the combustor assembly, thereby receiving heat directly from the combustion of the fuel/oxidant. A second stage heat exchange jacket surrounds an upper portion of the oxidant supply line adjacent the fuel nozzle receiving further heat from the compression heat which results from pressurization of the oxidant. The combustor unit includes an inner combustor sleeve whose inner wall defines the combustion zone. The inner combustor sleeve is surrounded by two concentric water channels, one defined by the space between the inner combustor sleeve and an intermediate sleeve, and the second defined by the space between the intermediate sleeve and an outer cylindrical housing. The channels are connected by an annular passage adjacent the top of the combustor assembly and the countercurrent nature of the water flow provides efficient cooling of the inner combustor sleeve. An annular water ejector with a plurality of nozzles is provided to direct water downwardly into the combustor unit at the boundary of the combustion zone and along the lower section of the intermediate sleeve. Write: **PATENT 1,160,151**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, Pennsylvania 19102-1366, U.S.A.

Community Alarm System/333

Système d'alarme communautaire/333

L'invention concerne des blocs d'alarmes localisés individuellement chez chacun d'un groupe de voisins et destinés à signaler sous forme audible et visuelle la présence d'intrus chez n'importe lequel des voisins faisant partie du groupe. Les blocs sont interconnectés par conducteurs électriques. Chacun des blocs d'alarmes est constitué d'un émetteur sonore, d'indicateurs visuels permettant de localiser le domicile cambriolé, d'un interrupteur permettant la mise en ou hors circuit d'au moins un dispositif de détection d'intrusion, lequel transmettra le signal d'alarme à chacun des blocs d'alarmes du système, sauf celui localisé dans le domicile là où le dispositif de détection est activé. L'équivalent d'un dispositif de détection peut aussi servir chez chacun des voisins afin de transmettre un signal d'alarme qui alertera ses voisins qu'on a besoin d'aide. Écrire à: **BREVET 1,160,315**, Conrad Dion, 22, rue St-François, Hull (Québec) J9A 1A9 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Video Game Exercising Device/333

Dispositif d'exercices de coordination pour la pratique des jeux électroniques sur écran/333

A device for translating exercise movement from a mechanical repetitive exercise means into the motion of a marker on a television screen. The device comprises a frequency monitoring means to be associated with a mechanical repetitive exercise means to convert the frequency of repetition of the exercise means into electronic pulses of related frequency. An electronic control means is provided to be electronically connected to receive input from the frequency monitoring means and to be electronically associated with a video screen. The electronic control means comprises input scanning means to scan input pulses received from the frequency monitoring means, and a microprocessor electronically associated with the input scanning means and, when operational, a video screen to translate frequency of pulses to a corresponding rate of motion in a given direction for a marker on the video screen. The device preferably further comprises a turn control means manually actuatable by the operator to provide electronic signals to identify a degree of turn for the operator, the electronic control means to translate such signals into a corresponding direction of motion for the marker on the video screen. The electronic control means may also comprise memory means electronically associated with the microprocessor for storing one or more basic game patterns according to which the motion of the marker will be affected. Such device permits one or more operators of mechanical repetitive exercise means to coordinate the motion of one or more corresponding markers on a video screen with the operation of that exercise means. Write: **PATENT 1,160,373**, Ronald J. Aitken, 1696 Victoria Street, Kingston, Ontario K7M 5H5; Roelof Fiegen, 715 Collins Bay Road, Kingston, Ontario K7M 5H1 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Process for the Recovery of Lead from a Lead-Bearing Sulfide Concentrate/333

Méthode de séparation du plomb en présence dans les concentrés de sulfure/333

Lead is recovered from a lead-bearing sulfidic concentrate by heating the concentrate in such a manner that lead and its compounds pass into the gas phase. The oxygen pressure in the gas phase is adjusted by oxidation or reduction in order to cause the compounds of lead to react with each other to form lead, and the gas phase is cooled in order to condense the metallic lead out from the gas. Write: **PATENT 1,160,461**, Outokumpu Oy, Töölönkatu 4, SF-001000 Helsinki 10, Finland and send copy of your initial correspondence to Canadian Embassy, Pohjois Esplanadi 25B, 00100 Helsinki 10, Finland.

Letterguide/333

Guide de lettrage/333

A letter forming stencil for use in signwriting or the like comprises a substantially rectangular plate having two apertures formed therethrough and having a separate corner forming piece or pieces, the stencil in use being placed on the surface upon which it is desired to form letters and the outline of the letter being traced thereon, the length of various lines comprising the letter being judged against indication means and spaced around the perimeter of the plate and the corners of the letter being formed with the aid of corner forming pieces. The corner forming pieces may comprise any one of a) quadrants pivotably located adjacent each corner of the plate, and being pivotable so as to extend over the perimeter of the plate, b) a T shaped piece able to be pivotably located centrally on the plate, the arms of the T shaped piece extending over the perimeter of two corners of the plate, c) a separate piece having a number of corners formed thereon or d) alternate round or square shaped corners formed in the plate, the plate being moved in order to position the corners as desired on the letter outline. Write: **PATENT 1,160,504**, George A. Johnstone, Elgin Vale, Grantham, Queensland, 4347, Australia and send copy of your initial correspondence to Canadian Consulate General, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, N.S.W. 2000, Australia.

Stacker with Improved Hydraulic Cylinder Movement/333

Empileuse à fonctionnement perfectionné du cylindre hydraulique/333

An apparatus for controlling the movement of a fluid — actuated hydraulic cylinder. A pumping mechanism is provided to pump fluid into the hydraulic cylinder; and a tank receives the fluid expelled from the hydraulic cylinder. A reversing valve between said pumping means and said hydraulic cylinder means control the flow direction of the fluid into and out of the hydraulic cylinder and a valve mechanism between the pump means and the hydraulic cylinder, and operatively connected to the hydraulic cylinder, controls the fluid flow rate into and out of the cylinder corresponding to the motion of the hydraulic cylinder. One embodiment of the invention is specifically designed to power the main drive gear of an apparatus for stacking battery plates and separators. Write: **PATENT 1,160,540**, General Battery Corporation, P.O. Box 1262, Reading, Pennsylvania 19603 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, Pennsylvania 19102-1366, U.S.A.

In-Situ Vitrification of Soil/333

Vitrification du sol sur place/333

A method of vitrifying soil at or below a soil surface location. Two or more conductive electrodes are inserted into the soil for heating of the soil mass between them to a temperature above its melting temperature. Materials in the soil, such as buried waste, can thereby be effectively immobilized. Write: **PATENT 1,160,668**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102-1366, U.S.A.

Terpolymerization of Ethylene, Sulfur Dioxide and Carbon Monoxide/333

Terpolymérisation de l'éthylène, du dioxyde de soufre et du monoxyde de carbone/333

A high molecular weight terpolymer of ethylene, sulfur dioxide and carbon monoxide stable at 280°C and containing as little as 36 mol% ethylene and about 41-51 mol% sulfur dioxide; and to the method of producing said terpolymer by irradiation of a liquid and gaseous mixture of ethylene, sulfur dioxide and carbon monoxide by means of Co-60 gamma rays or an electron beam, at a temperature of about 10-50°C, and at a pressure of about 140 to 680 atmospheres, to initiate polymerization. Write: **PATENT 1,160,795**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1310, Philadelphia, Pennsylvania 19102-1366, U.S.A.

Warning Light/333

Signal avertisseur lumineux/333

A warning and signal light for use particularly at road accidents and to warn of automotive breakdowns. The assembly consists of at least two housing elements which are adapted for vertical erection with each of the housing elements having a signal lamp. The assembly is collapsible to facilitate storage. Write: **PATENT 1,161,007**, Herbert Böse, Am Dachsbau 9, D-6232 Neuenheim/Ts, West Germany and send copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, D-4000 Duesseldorf, West Germany.

Gas Hydrates Drilling Procedure/333

Forage avec séparation des gaz des hydrates/333

When drilling through hydrate-containing strata, instead of increasing the density of the drilling mud to reduce or prevent melting of the hydrates, the density of the mud is maintained at a level sufficiently low to promote melting of the hydrates. The gas generated by the melting hydrates rises to the surface with the drilling mud which is diverted by a rotating diverter

at the wellhead to a degasser where the gas is separated from the mud, and the mud is returned to the mud tanks for re-use. If the drill string is to be removed temporarily, the mud density is increased to stop hydrate melting. Write: **PATENT 1,161,027**, Lindsay J. Franklin, Box 7, Site 26, R.R. 2, Calgary, Alberta T2P 2G5 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Collapsible or Folding Ski/333

Ski pliant/333

The invention relates to skis, more particularly to a ski designed to be folded. For locking the front and back parts of the ski into stretched out position, ready for use, it is possible to have a top part acting as a splint which is bolted, for example, to the inner ends of the two ski parts, preferably between two heel-pieces on top of the ski parts. As a further possible design, the system for locking the ski parts into the stretched out or operable position, two links with a toggle function may be used, or the top face of the two ski parts may have a groove into which the top part is slipped. As a further possible locking system, the two ends of the ski parts, nearest each other, are designed with a groove into which a locking core-piece with side teeth is placed and kept in position by a metal cover plate on top of it. In a further design, as part of the present invention, a lever and a chain link are present on the top side of the ski at the position where its two halves are joined together. One end of the chain link, furthest from the lever, is slipped over a hook and then the lever is pushed downwards pulling tight the chain link and making certain of a firm overall ski structure. Write: **PATENT 1,161,077**, Herbert Esper, Burgermeister Heinrich Str. 23, 8403 Bad Abbach, Deutschland, West Germany and send copy of your initial correspondence to Canadian Consulate General, Immermannstrasse 3, D-4000 Duesseldorf, West Germany.

Coded Electrical Security System for Vehicles, Such as Automobiles/333

Système électrique de sûreté à code pour véhicules, notamment des automobiles/333

A coded security system for an electrical circuit energizing safety lights installed on a vehicle is disclosed. The system comprises a bank of series connected toggle switches which can be operated in one position following a predetermined code for completing an electrical circuit through the terminals of all the switches, means for connecting one terminal of one of the toggle switches to a source of power, and means for connecting one of the terminals of the last toggle switch in the series to the circuit, whereby operation of the toggle switches following the predetermined code will complete the electrical circuit and energize the circuit. Write: **PATENT 1,161,138**, Ovila Chabot, 78, du Collège Street, Pont-Rouge, Québec G0A 2X0 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Molding Apparatus for Expanding Beads of Polystyrene Material/333

Appareil de moulage pour la production de perles de polystyrène expansées/333

An improved molding apparatus for expanding beads of polystyrene material into large blocks in the manufacture of insulating material. The mold apparatus has walls made from a plurality of tubular wall members arranged in horizontal, side-by-side relation. The wall members are mounted transversely within encircling frames. Steam is supplied to each wall member, and from within each wall member, into the mold cavity to expand the polystyrene beads held therein into a block. An improved device is also provided to remove the block from the mold cavity. Write: **PATENT 1,161,225**, Produits Chimiques Potton Ltée, P.O. Box 41, Mansonville, Quebec J0E 1X0 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Nuts with Internal Band/333

Écrous à garniture de blocage sur filets/333

A self-locking nut has a threaded bore for receiving the threaded shank of a co-operating bolt, which bore terminates within the nut body in a reduced diameter bore portion which may be unthreaded. The maximum diameter of this portion is less than the major diameter of the remainder of the bore. The nut body is formed of a plastics or other lightweight material and is reinforced by one or more cylindrically-shaped inclusions formed of a material having a tensile strength greater than the material of the nut body, and embedded or encastred within the material of the nut body at a greater radius than the maximum radius of the thread and extending axially over at least part of the axial length of the reduced diameter bore portion. Write: **PATENT 1,161,285**, E.F.G. Limited, P.O. Box N 1480, Nassau, Bahamas and send copy of your initial correspondence to Canadian High Commission, P.O. Box 1500, Royal Bank Building, 30-36 Knutsford Boulevard, Kingston 10, Jamaica.

Wall Hanger Hooks/333

Crochets muraux de suspension/333

A new type of wall hanger hooks which are stamped out of sheet metal and hardened, each hook comprising a single member that includes a toothed prong for driving into a wall, and a portion that rests against a wall surface and which includes one or several individual hook elements upwardly angled for support of a hanging object. Write: **PATENT 1,161,414**, Richard

Haug, c/o Richard L. Miller, 3612 Woolworth Building, New York, N.Y. 10007, U.S.A. and send copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020-1175, U.S.A.

Method for the Preparation of a Scintillographic Agent/333

Méthode de préparation d'un agent de scintillographie/333

The invention is a method of preparing an N-(2,4-dimethylphenyl-carbamoylmethyl)-iminodiacetic acid which comprises reacting an ω -chloro-2,4-dimethylacetanilide with a sodium salt of iminodiacetic acid. The N-(2,4-dimethylphenyl-carbamoylmethyl)-iminodiacetic acid can be chelated with technetium 99m Tc, to form a scintillographic agent which displays improved durability when compared with known scintillographic agents. Write: **PATENT 1,161,455**, Uniwersytet Warszawski, Warszawa, Krakowskie, Przedmiescie 26/28, Poland and send copy of your initial correspondence to Canadian Embassy, Ulica Matejki 1/5, Srodmiescie Warsaw 00-481, Poland.

Machine for Hank Drawing and Doffing/333

Machine de flottage et de rangement d'écheveaux de fil/333

A machine for drawing yarn hanks from advancing hank carrying supports and doffing the drawn hanks on a carriage or container or conveyor belt. The machine comprises a pliers holder head wherein the pliers, each formed of two or more rods movable near one another, can be adjusted in spacing for adaptation to various dimensions of hanks. The head is rotatable about a horizontal axis to arrange the hanks in horizontal direction and is tiltable or upsettable about a further horizontal axis. Furthermore, the head is mounted to be movable parallel to the extension of the hank carrying supports, and preferably also parallel to the advancement or feeding of the hank carrying supports. Write: **PATENT 1,161,463**, Officine Minnetti di Ornella Raveggi & C. S.a.s., Via Colonna, 2-51018 — Pieve a Nievole (Pistoia), Italy and send copy of your initial correspondence to Canadian Embassy, Via. G.B. de Rossi 27, 00161 Rome, Italy.

Danny's Dare/333

Jeu d'adresse et de logique "Danny's Dare"/333

The invention entitled DANNY's DARE, consists of a "body" which can be of two or more sections kept together at their center by a peg, but which can be rotated freely, horizontally. The various sections of the body contain a plurality of vertical and horizontal holes. There are a number of vertical pegs containing strategically positioned horizontal holes. There are a number of thinner horizontal pegs of different lengths. The degree of complexity desired can be increased by increasing the number of sections of the body and/or increasing the number of horizontal and/or vertical holes, and as a consequence, increasing the number of horizontal and/or vertical pegs. The various parts of the invention can be made of wood, plastic or any other suitable material such as metal. Write: **PATENT 1,161,465**, Daniel Paquette, 1133 Grenoble Crescent, Orleans, Ontario K1C 2C5 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Method and Apparatus for Identifying Objects Such as Bottles/333

Méthode et dispositif de reconnaissance d'objets, notamment des bouteilles/333

An object such as a bottle to be identified by its shape is made to travel between a source and an elongated radiation receiver in a direction radiation receiver in a direction oblique relative to the travelling direction of the object so as to define, during the travelling, positions in which said receiver presents a segment, the points of which are at least partly occluded by the object, flanked by first and second segments (X and Z) not occluded. The length variations of at least two of the three segments of said receiver are read out for obtaining a characteristic relation of the object shape. Parameters of this relation are compared with corresponding parameters of characteristic relations of the shape of typical objects so as to find out whether the object travelling belongs to the category of one of the typical objects, and if in the affirmative, to which of them. The invention is applicable to the automating refund of deposits on bottles. Write: **PATENT 1,161,516**, Supermarket Systems, 2, Chemin du Charme et du Carrosse, 78470 Saint Lambert des Bois, France and send copy of your initial correspondence to Canadian Embassy, 35, Avenue Montaigne, 75008 Paris, France.

Mats/333

Nattes/333

A mat of the kind having a plurality of first strips of rigid material such as aluminium, and a plurality of second strips of flexible material such as rubber, interposed alternately between the first strips, the strips being secured together side-by-side by connecting means wherein said first strips each comprise an upper horizontal wall and a depending wall connected thereto, the apertures provided in said depending wall, and the or each connecting element extending through apertures in the first and second strips and being of such configuration so as to restrain the upper walls of the first strips from deforming downwardly to any substantial extent when a load is imposed. Write: **PATENT 1,161,609**, Nuway Manufacturing Company Limited, Endurance Works, Coalport, Telford, Shropshire, TF8 7HX, England and send copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Method of Forming a Net-Like Structure/333**Méthode de production d'une résille/333**

A method is disclosed for forming a net-like structure from a suitable material such as metal or a synthetic polymer. The structure avoids the problems of low tear strength at the joints in the mesh and enables novel shapes and designs to be formed that are not possible to make by other methods. The method comprises the steps of forming a planar web from a suitable material in a plastic state, the forming providing for the planar web to have a substantially flat parting plane, the planar web having an expandible pattern of strands and strand joints with apertures therebetween, and expanding the planar web by forcing the exterior and interior of the web apart in a direction generally perpendicular to the planar web, to form a three dimensional net-like structure. Write: **PATENT 1,161,618**, Rudolf Parnigoni, 62 Du Domaine Boulevard, Ile Perrot, Quebec J7V 5V6 and send copy of your initial correspondence to the Licensing Opportunities Section (FOI), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Concrete Mould and Method of Moulding Concrete Panels/333**Coffrage de bétonnage, et méthode de coulée de panneaux en béton/333**

A concrete mould employs resilient side shuttering, made of rubber for example, which is prevented from deflecting, when concrete is poured, by tensioning wires extending along the length of the shuttering. Pieces of the shuttering, forming the sides of a casting box, extend between fixed end plates having a series of holes to receive the tensioning wires for adjusting the modular width of panels cast in the box. A series of apertures is provided in each piece of side shuttering so that pneumatic core formers can be inserted through aligned apertures so as to extend across the casting box. Different types of joint formers, either fully or partly resilient, can be located about the core formers, each joint former having a series of grooves to receive reinforcement or tensioning wires or rods. When inflated the pneumatic core former locks the joint formers in place. Opening formers can be made from the shuttering and the joint formers. Standard reinforcement cages can be located in the casting box at modular position corresponding with aligned apertures in the side pieces of shuttering. The modular positions are digitally coded to enable the casting process to be automated by a machine travelling on rails along the length of a casting bed which supports the side shuttering and end plates. The machine stops at the modular position to locate the respective formers and/or reinforcement cages and it also carries out automatic functions such as cleaning and oiling, laying, packing, screeding and finishing wet concrete. Write: **PATENT 1,161,625**, Kandiah T. Nayagam, No. 6B, 2nd Floor, Lorong Medan Tuanku Satu, Kuala Lumpur, Malaysia and send copy of your initial correspondence to Canadian High Commission, P.O. Box 990 A.I.A. Building, Ampang Road, Kuala Lumpur, Malaysia.

Single-Grip Mixing Valve/333**Robinet mitigeur à poignée unique/333**

A single-grip valve having a valve body with water inlets and a water discharge outlet and ceramic discs fitted in the body, the mutual position of the discs determining the mixing ratio of cold and hot water. One ceramic disc is moved by a lever which is attached with bearings to a turning piece fitted to turn inside the body. In order to limit the turning movement of this turning piece and, together with it, that of the level, one of the members, the turning part and the body part surrounding it, is equipped with axial protrusions spaced around it and the other has respectively at least one axial protrusion. However, the protrusions of the different members do not overlap each other in the radial direction, but between the said members there is fitted at least one detachable limiting piece which can engage between the protrusions of one member and radially overlaps the protrusions of the other member. Write: **PATENT 1,161,726**, Oras Oy, Rauhankatu 28, SF-26100 Rauma 10, Finland and send copy of your initial correspondence to Canadian Embassy, P.O. Box 779, 00101 Helsinki, Finland.

Apparatus and Method for Retaining Pleats in Draperies/333**Méthode et dispositif pour fixer les plis de rideaux/333**

Apparatus and method for retaining pleats in hanging draperies including an elongated flexible cord having a plurality of elongated resilient members fixedly secured at spaced locations along the cord, each member including a first mating section interconnected by a fold portion to a second mating section and a pointed end extending from one of the mating sections. A pointed end receiver extends from the other of the mating sections in a direction opposite the pointed end whereby the two mating sections are releasably locked together with the pointed end entering the receiver clamping a portion of one of the pleats of the hanging drapery therebetween. In this manner, each resilient member is secured to a pleat thereby retaining the drapery in a hanging position spacing one pleat from another. Write: **PATENT 1,161,744**, Jeff A. Jacobson, 22 Woodgrove, Irvine, California 92714 and send copy of your initial correspondence to Canadian Consulate General, 510 West Sixth Street, Los Angeles, California 90014-1377, U.S.A.

Automatic and Manual Chimney Fire Extinguisher/333**Extincteur manuel et automatique de feux de cheminée/333**

The disclosure is of a method or system for controlling fires originating in the chimney or chimney connector of internal combustion space heating appliances. The method or system provides for detecting excessive heat, the presence of which

automatically releases a flow of extinguishant into the chimney or chimney connector, thereby rapidly eliminating flame in the chimney or chimney connector, as well as providing a fire retardant coating to any combustible materials present there. The advantages of the method or system of the invention resides in its ability to effectively control chimney fires, its simplicity of operation, and its reliability of operation, and its ease of installation. Write: **PATENT 1,161,805**, Stephen Aderneck, Box 188, Quathiaski Cove, B.C. V0P 1N0 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Retractable Diving Board/333

Tremplin escamotable/333

Diving boards in swimming pools are fixed securely to the structure making them immovable in the longitudinal direction. In this invention, a diving board is made retractable by placing it on a pair of tracks which are secured to the structure. By allowing the diving board to move longitudinally on the tracks by means of a set of small wheels and an electric motor, the diving board can be retracted as soon as the diver has jumped up and thus avoiding an accident of the diver with the diving board on his/her way down. Write: **PATENT 1,161,869**, Ravi Jaisinghani, 15227-124th Street, Edmonton, Alberta T5X 1Z4 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Golf Ball Caddie/333

Magasin à balles de golf/333

This caddie carries six (6) golf balls which can be retrieved one by one at the bottom by inserting thumb and forefinger in slot at bottom. The balls can be inserted in the top by pressing the ball with the palm of the hand on serrated lid at the top. The golf ball caddie can be attached to the handle of a golf cart. Write: **PATENT 1,161,875**, Robert C. Timleck, 9 Faith Avenue, Downsview, Ontario M3H 1W2 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

All Digital Phase-Frequency Locked Loop/333

Boucle d'asservissement et de phase-fréquence entièrement numérique/333

An all digital phase-frequency locked loop consists of an up-down counter and a differential latch as a phase-frequency comparator, a frequency rate multiplier as a controlled oscillator and a dividing counter as a jitter filter. An input signal is applied to the up-count input of the up-down counter and the feedback signal is applied to the down-count input of the up-down counter via a differential latch. The up-down counter's output controls the frequency rate multiplier to generate a variable frequency output. This variable frequency is further filtered by a counter to average the jitter and increase the signal to noise ratio before it is applied to the down-count input of the counter via the differential latch. The loop has a wide pull-in, locking range, a fast acquisition time, stable response and is highly suitable for circuit integration because of its all digital nature. An application of this phase-frequency locked loop for a tone decoder is also disclosed. Write: **PATENT 1,161,910**, Chung K. Tsang, 2969 Fairlea Crescent, Suite 1206, Ottawa, Ontario K1V 9N2; Multi Dimension Ltd., P.O. Box 5506, Station F, Ottawa, Ontario K2C 3M1 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Wrench Coupling Device/333

Dispositif d'accouplement pour clé de serrage/333

A device which facilitates the connection and disconnection of threaded members includes a first handle receiving collar secured at the end of an elongate member and a second handle receiving collar which is slidably and rotatably disposed on the elongate member. A first wrench is appropriately positioned on one of the threaded members and the first collar is positioned about the handle of the first wrench. In a similar manner, a second wrench is appropriately positioned on the threaded members and the slidable collar is positioned about its handle. Force is then applied to the elongate member of the device and the threaded members are expeditiously connected or disconnected. Write: **PATENT 1,162,084**, James F. Lehmann, 21180 West Toledo Street, Williston, Ohio 43468 and send copy of your initial correspondence to Canadian Consulate General, Illuminating Building, Suite 1008, Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Heat Control Systems/333

Système régulateurs de combustion/333

Improvements in fireplace systems include several features some of which are separably usable in other heating apparatus. The features include a barometric damper adaptor, a grate structure, a manner of mounting hollow grate tubes in a fireplace assembly, an improved combustion chamber assembly, a combined damper and ducting system, a revised plenum system for a fireplace or the like and a tempering system cooperative with such a unit. Write: **PATENT 1,162,121**, Charles M. Boyd, P.O. Box 634, Fort Collins, Colorado 80522 and send copy of your initial correspondence to Canadian Consulate General, One Maritime Plaza, Alcoa Building, Suite 1100, Golden Gateway Center, San Francisco, California 94111-3468, U.S.A.

Magnetic Device for Controlling Starting of a Single Phase Induction Motor/333

Dispositif magnétique commandant le démarrage d'un moteur à induction monophasé/333

A starter device for a single phase A.C. motor having a main winding and a starting winding disposed for connection to a single A.C. source. This starter device comprises a semiconductor switching device having a control electrode and a transconductive path, such as, for example a triac. This switching device is connected in series with the starting winding and the single A.C. source to energize or disconnect this starting winding. A magnetic detector is disposed between two adjacent poles of the main winding of the stator of the motor and has its axis of detection extending in the direction of the lines of magnetic flux forced out of the two adjacent saturated poles of the main winding during the initial inrush of current through this main winding upon starting of the motor. This detector has its two terminals respectively connected to the control electrode and to one of the power electrodes of the switching device in order to supply the control electrode when a magnetic flux is sensed to activate the switching device and therefore, to energize the starting winding. Upon starting of the motor, the sensed magnetic flux induces a current through the detector and energizes the starting winding. When the motor runs at nominal speed, the starting winding is disconnected because no magnetic flux is sensed. Write: **PATENT 1,162,233**, Antonio Ramirez, 5725 Buade Street, St. Leonard, Quebec H1S 1E3 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Method to Eliminate Corona Discharges by Means of a Fibre Generating Luminescent Discharges Triggered by Capillary Wetting/333

Méthode d'élimination d'effluves d'effet couronne par fibre génératrice de décharges lumineuses déclenchée par mouillage capillaire/333

L'invention a pour objet une méthode d'élimination des décharges partielles pulsatives de l'effet couronne sur les conducteurs métalliques d'une ligne aérienne de transport d'électricité à haute tension lorsque les conducteurs sont mouillés. Cette méthode consiste à fixer en contact intime avec chaque conducteur une matière fibreuse et non conductrice ayant un effet capillaire pour l'eau. L'effet capillaire de la matière fibreuse ainsi fixée assure la formation de fins filaments d'eau issus de la surface du conducteur lorsque ce dernier est mouillé. Ces filaments d'eau assurent à leur tour une génération de l'effet couronne sous forme de décharges permanentes se manifestant par un phénomène de luminescence plutôt que sous forme de décharges pulsatives. Cette méthode est particulièrement intéressante dans la mesure où elle réduit substantiellement le bruit audible et les interférences électromagnétiques générées par effet couronne à proximité des lignes aériennes de transport lorsqu'il pleut ou qu'il bruine, sans pour autant altérer les performances de la ligne de transport lorsque le temps est sec. L'invention a également pour objet un conducteur pour ligne aérienne de transport d'électricité à haute tension, permettant de mettre en oeuvre la méthode ci-dessus décrite. Écrire à: **BREVET 1,162,261**, Hydro-Québec, 1800 Montée Ste-Julie, Varennes (Québec) J0L 2P0 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Production of Anhydrous Aluminum Chloride Composition/333

Obtention d'une composition à base de chlorure d'aluminium anhydre/333

A process for producing an anhydrous aluminum chloride composition from a water-based aluminous material such as a slurry of aluminum hydroxide in a multistage extraction process in which the aluminum ion is first extracted into an organic liquid containing an acidic extractant and then extracted from the organic phase into an alkali metal chloride or chlorides to form a melt containing a mixture of chlorides of alkali metal and aluminum. In the process, the organic liquid may be recycled. In addition, the process advantageously includes an electrolysis cell for producing metallic aluminum and the alkali chloride or chlorides may be recycled for extraction of the aluminum from the organic phase. Write: **PATENT 1,162,381**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, PA 19102-1366, U.S.A.

Apparatus and Method for Making a Beverage/333

Dispositif et méthode de préparation d'une boisson/333

An improved beverage infusion device and a method of rapid brewing an infusible beverage substance such as fresh, fine ground, roasted coffee by air agitation in an air-water chamber. The wall of the chamber is constructed of a fine porous filtering material that confines particles of coffee during agitation thereof with water of an amount necessary for brewing either one or more serving portions of coffee. An air conduit directs air underneath the coffee particles accumulated in the air-water chamber that is immersed in hot water. The hot water enters the porous wall of the air-water chamber, saturating the coffee particles. One or more intermittent burst of air are directed by the conduit under the coffee particles thereby momentarily suspending the coffee particles in the water, and agitating the coffee particles and the water. The water solubles of the coffee are extracted rapidly and mixed with the water to create a beverage. Write: **PATENT 1,162,437**, Paul C. Gaskill, R.D. 1, Box 363 Dilliner, Pennsylvania 15327 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, PA 19102-1366, U.S.A.

Solar Energy Collector/333

Héliocapteur/333

A flexible solar energy collector of unitary, one-piece, self-supporting construction provided with substantially true-round manifolds and secondary manifolds interposed between the primary manifolds and a multiplicity of fluid flow passages extending transversely therebetween. The opposite end portions of the primary manifolds are provided with inserts for reinforcing the same. Means are provided for coupling adjacent collectors together to form an array of such collectors in a solar heat collecting system. Write: **PATENT 1,162,450**, Libbey-Owens-Ford Company 811 Madison Avenue, Toledo, Ohio 43624 and send copy of your initial correspondence to Canadian Consulate General, Illuminating Building, Suite 1008, 55 Public Square, Cleveland, Ohio 44113-1983, U.S.A.

Remote Control Having Push-Pull Blade with Captive Rolling Elements/333

Télécommande à lame de traction et de poussage guidée par des galets captifs/333

Remote controls of the type in which a push-pull blade extends through a tubular sheath and is supported on its opposite sides by rolling elements held spaced from one another by cage strips are improved by providing openings in the push-pull blade to capture the rolling elements and thus obviate the cage strips. A feature of the improvement is that the openings in the blade are dimensioned to permit the rolling elements on opposite sides of the blade to be in rolling contact with each other. Write: **PATENT 1,162,464**, Paul W. Garbo, 48 Lester Avenue, Freeport, New York 11520 and send copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020-1175, U.S.A.

Safety Holder for Extinguisher/333

Support sécuritaire pour extincteur/333

L'invention a pour objet un dispositif de support pour extincteur du type comprenant un crochet fixe auquel est suspendu l'extincteur. Ce dispositif est avantageusement muni d'un loquet de sécurité actionné par des moyens appropriés pour venir bloquer l'accès au crochet dès que l'extincteur est décroché, de façon à éviter que ce dernier soit raccroché après usage. Un système de clé est prévu pour ne permettre qu'à certaines personnes autorisées de raccrocher l'extincteur ou, le cas échéant, d'en accrocher un autre, ceci permettant un contrôle de l'utilisation et de l'état des extincteurs beaucoup plus efficace et par conséquent beaucoup plus sécuritaire. Le cas échéant, le dispositif peut être pourvu d'un micro-interrupteur relié à un circuit de contrôle pour immédiatement avertir le personnel de sécurité dès qu'un extincteur est décroché. Écrire à: **BREVET 1,162,521**, Hydro Québec, 75, boulevard Dorchester Ouest, Montréal (Québec) H2Z 1A3 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Multiple Stage Magnetic Railgun Accelerator/333

Accélérateur magnétique multi-étagé sur rampe de lancement/333

A multiple stage magnetic railgun accelerator for use as a projectile launch device by accelerating a projectile by movement of a plasma arc along the rails. The railgun is divided into a plurality of successive rail stages which are sequentially energized by separate energy sources as the projectile moves through the bore of the railgun. Propagation of energy from an energized rail stage back towards the breech end of the railgun can be prevented by connection of the energy sources to the rails through isolation diodes. Propagation of energy from an energized rail stage back towards the breech end of the railgun can also be prevented by dividing the rails into electrically isolated rail sections. In such case apparatus is used to extinguish the arc at the end of each energized stage and a fuse or laser device is used to initiate a new plasma arc in the next energized rail stage. Write: **PATENT 1,162,580**, Mr. James E. Denny, Assistant General Counsel for Patents, Office of the General Counsel, U.S. Department of Energy, Washington, D.C. 20545 and send copy of your initial correspondence to Canadian Consulate General, 3 Parkway Building, Suite 1620, Philadelphia, Pennsylvania 19102-1366, U.S.A.

Jewelry Clasp/333

Fermeur utilisé en bijouterie/333

Cette invention concerne un fermoir utilisé en bijouterie. Le fermoir comporte un premier élément ayant un corps principal et une mâchoire en forme de crochet, reliée intégralement au corps principal et un deuxième élément ayant aussi un corps principal et une mâchoire en forme de crochet, reliée intégralement au corps principal. Les mâchoires du premier et du second élément sont effilées, une à gauche et l'autre à droite, de façon à pouvoir se chevaucher mutuellement. Des moyens, incluant une tige et un ressort, sont prévus pour pivoter les corps du premier et du deuxième élément l'un par rapport à l'autre, de façon à ce que les surfaces effilées des mâchoires forment des faces de contact. Écrire à: **BREVET 1,162,753**, Guy Couture, 21 St. Paul, Ste Brigitte-de-Laval (Québec) G0A 3K0 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Divided Thrust Apparatus/333

Mécanisme répartiteur de poussée axiale/333

This invention relates to gear drives, and particularly to an apparatus for dividing and spreading the thrust loads to which a shaft is subject. First bearing means journal the shaft and accommodate limited axial movement of the shaft. A double helical pinion is provided on the shaft and two double helical gears mesh with the helical pinion with each of said double helical gears being mounted on a separate shaft. Second bearing means journals each of the gear shafts and a thrust bearing works against the end of each gear shaft. There may be provided a linkage responsive to axial movement of the gear shafts under thrust loads to equalize the loads therebetween. Write: **PATENT 1,162,763**, The Falk Corporation, P.O. Box 493, Milwaukee, Wisconsin 53201 and send copy of your initial correspondence to Canadian Consulate General, 15 South Fifth Street, Minneapolis, Minnesota 55402-1078, U.S.A.

Female Dies/333

Matrice d'estampage/333

A segmented female die for use in a closed die set comprising a pair of similar center segments and a pair of similar "half moon" shaped outside segments. The four segments also define the ejector pin opening. The die segments are prevented from relative motion between themselves by interlocks comprising closely mating protrusions and guideways which, in cooperation with other means, produce a rigid female die. The interlocks permit the use of relatively simple manufacturing techniques such as grinding as opposed to more sophisticated techniques such as electrical discharge machining. Write: **PATENT 1,162,764**, W-F Industries, Inc., 525 Woodward Avenue, Suite 1200, Bloomfield Hills, Michigan 48013 and send copy of your initial correspondence to Canadian Consulate General, 1920 First Federal Building, 1001 Woodward Avenue, Detroit, Michigan 48226-1966, U.S.A.

Furnaces/333

Appareil de chauffage/333

A grateless furnace of elongate substantially cylindrical configuration comprises means to introduce solid fuel into the combustion chamber and to permit said fuel to form a fire bed in the bottom thereof. The combustion chamber is of such configuration that slag formed during combustion of the fuel accumulates under the influence of gravity, at a low part of the bottom of the combustion chamber. An opening is provided in the low part through which said slag may pass for removal from the furnace. Write: **PATENT 1,162,791**, Suxe Combustion Limited, P.O. Box No. 1, Abergavenny, Gwent, England and send copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Process for Producing Isopropylalcohol from Cellulosic Substrates/333

Méthode d'obtention d'alcool isopropylique à partir de substrats cellulosiques/333

A process for producing isopropyl alcohol and useful byproducts from cellulosic substrates without utilizing toxic acids. This process comprises the steps of: (1) digesting cellulosic substrates in a heated sodium carbonate solution; (2) digesting the cellulosic product of step (1) in a heated solution of isopropyl alcohol and aluminium isopropylate to produce a glucose biomass and a black liquid of saturated acyclic hydrogen carbon; (3) mixing the glucose biomass of step (2) under heat and pressure with basic aluminate plus amylolytic enzymes or xylophages bacteria to initiate fermentation of the glucose biomass; and (4) adding sodium acetate, calcium carbonate, the black liquid and a formol-phenol sulfonate solution of $\text{ROCH}_2\text{-CH}_2\text{-OH}$, $\text{ArOCH}_2\text{-OH}$ and $\text{RSCH}_2\text{-CH}_2\text{OH}$ to the mixture of step (3) and progressively increasing the temperature of such mixture to at least approximately 145 degrees and maintaining such temperature until isopropyl alcohol is produced. Write: **PATENT 1,162,867**, Les Services de Consultation D&B Plus Limitée, 3^e étage — Place Lauzanne, 400 boulevard Labelle, Laval, Québec H7V 2S7 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Removal of Gaseous Formaldehyde with Solid Organic Nitrogen Compounds/333

Élimination du formaldéhyde gazeux avec les composés organiques azotés solides/333

In this invention the process of chemisorption with solid absorbent, composed of amines, amides, proteins or their mixture, is employed to transfer gaseous formaldehyde to solid, nonvolatile compounds and retain it within the absorber. The absorbers, which can be used as both active and passive systems for formaldehyde removal or its collection, can be arranged in different configurations, optimized for specific applications by mixing the reactive components with, or bounding them to, different carrier materials which have high surface to volume ratio. The absorbents are suitable for occupational respiratory protection, indoor atmosphere purification in working and living areas and for formaldehyde absorption from process gases. Write: **PATENT 1,162,904**, Miloslav J. Kabat, 149 Greyabbey Trail, Scarborough, Ontario M1E 1W2 and send copy of your initial correspondence to the Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Potting Stand for Transplanting Potted Plants/333

Support pour déposer des plantes/333

A transplanting device for removing plants from flower pots or other containers without damaging the root system includes a stand defined by a disc-shaped base and a post extending upwardly therefrom, and a washer on the base around the post for supporting a growing medium and a plant, whereby the post, base, washer, growing medium and plant can be lifted from the container without disturbing the root system. A large slotted disc can be inserted between the base and washer for supporting additional growing medium in a larger container. Write: **PATENT 1,163,441**, David E. Kondruk, Box 34, Wabamun, Alberta T0E 2K0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Sewer Fluid Trap/333

Clapet antiretour sur égout/333

A sewer fluid trap is disclosed, consisting of firstly a rigid flat plate permanently secured to a manhole wall surrounding a sewer pipe outlet. This flat plate has a pair of spaced-apart lateral slots. Secondly, an elbow having a lower and submerged in the catch-basin of a manhole and an upper and rigidly secured to a backplate. The latter is removably inserted into the lateral slots, thereby forming a tight seal between itself and the back-plate. Central holes are formed in both plates and are in registry with the sewer pipe outlet when the trap is installed. A latch locks the two plates together. A ring is fixed to the elbow to lift the same and its back-plate from the manhole without having to descend into the same. Write: **PATENT 1,163,525**, Marcel Guibord, 124 Renaud Street, Ile Perrot, Quebec J7Y 5X5 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Combination Base Cup and Bottle/333

Ensemble bouteille et coupelle de fond/333

A bottle formed of a flexible plastics material such as biaxially oriented polyethylene terephthalate having a convex, generally rounded bottom incapable of supporting the bottle in a stable, upright position, and a flexible snap-on supporting cup applied to the bottom of the bottle. The base of the cup has a support surface for supporting the bottle in a stable, upright position. Write: **PATENT 1,163,583**, Plastipak Packaging, Inc., 9135 General Court, Plymouth, Michigan 48170 and send copy of your initial correspondence to Canadian Consulate General, 1920 First Federal Building, 1001 Woodward Avenue, Detroit, Michigan 48226-1966, U.S.A.

Security Container/333

Réceptif de sécurité/333

A security container comprises a body having first and second rigid body parts, at least one of the body parts comprising an open-mouthed tray having rigid side, end and base walls, said body parts being connected at adjacent edges by hinge means which permit of the body parts being relatively pivoted between an open condition wherein access may be gained to the interior of the tray or trays, and a closed condition wherein access cannot be gained to the interior of the tray or trays, each of the body parts having co-operating means which, when said container is in said closed condition, provide at least one discrete cavity within the container, in which cavity or cavities an article or articles may be contained, at least one of the body parts having a handle portion whereby the container may be carried and the article or articles in said cavity or cavities is or are prevented from being discharged from said cavity or cavities during carriage by said co-operating means. Write: **PATENT 1,163,607**, Loach Manufacturing Company Limited, Stourvale Road, Lye, West Midlands, England and send copy of your initial correspondence to Commercial Division, Canadian High Commission, One Grosvenor Square, London W1X 0AB, England.

Granular Material Spreader/333

Épandeur de matière granulée/333

A spreader for granular material such as fertilizer or seed includes a casing defined by an inlet duct, a discharge hood integral with the inlet duct and a diffuser in the shape of a segment of a cone in the hood beneath the inlet duct for receiving the granular material introduced into the casing and uniformly spreading such material. The hood, which is a major segment of a frustum, prevents wind affecting the spreading action of the diffuser. Write: **PATENT 1,163,655**, William J. Bourne, P.O. Box 1840, Kindersley, Saskatchewan S0L 1S0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Velocipede/333

Vélocipède/333

A velocipede which may be constructed either as a bicycle or a tricycle by attaching the appropriate rear frame to a central unitary frame located in the area of the headstock. As a bicycle front forks protrude downwardly from the headstock and support a front wheel driven by pedal cranks, and rear forks are cantilevered downwardly and rearwardly from the central unitary frame. As a tricycle the rear forks are replaced by a frame supporting two side by side rear wheels. Handle bars

protrude upwardly from the headstock and an elongate inclined seat protrudes rearwardly and upwardly from the headstock. The velocipede is simple, compact and may be ridden by riders of different sizes without adjustment. Write: **PATENT 1,163,656**, Acrow Pty. Limited, 11 Ferndell Street, Guildford, New South Wales 2161, Australia and send copy of your initial correspondence to Canadian Consulate General, A.M.P. Centre, 8th Floor, 50 Bridge Street, Sydney, N.S.W. 2000, Australia.

Scaffolding Arrangement/333

Échafaudage/333

A scaffolding generally of the type for use in placing siding on a vertical wall of a house wherein the scaffolding has two posts disposed vertically and supported at the lower end by a support structure offset from the post in a direction away from the house and having legs offset from one another in a direction parallel to the wall of the house. Write: **PATENT 1,163,660**, Gaetan G. Bergeron, Assiniboia, Saskatchewan S0H 0B0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Beam Dancer Fusion Device/333

Dispositif de fusion à faisceau mobile de concentration/333

This invention relates to and comprises materials for fuel elements, and optical and electromagnetic equipment for ignition and maintenance of controlled fusion processes, for use in powering engines and as an energy source for driving electrical generators for electric power stations. Characteristics for commercial development are described. An approach for intensifying the heat of gas flames is also indicated. Write: **PATENT 1,163,732**, Henry B. Maier, 6 Sealey Avenue, Apt. 3K, Hempstead, Long Island, New York 11550 and send copy of your initial correspondence to Canadian Consulate General, 1251 Avenue of the Americas, New York City, N.Y. 10020-1175, U.S.A.

Heat-Insulating Window Glass/333

Vitre thermofuge/333

A heat-insulating window pane comprises at least one cavity which has no communication with the external faces of the pane. The cavity is evacuated to a gas pressure below 0.1 mbar. These bridging members extend transversely of the pane. The pane is easy to handle and its transparency properties are good because the cavity extends approximately to the marginal portions of the pane and occupies less than 20% of the total volume of the pane. The total area of the bridging members in a lengthwise section through the glass covers less than 10% of the area of the pane. The pane is relatively cheap to produce and does not constitute a risk of implosion because of the low volume of the cavity. Write: **PATENT 1,163,866**, Torsten Assarsson, Batterigatan 10, S-415 01, Goteborg, Sweden and send copy of your initial correspondence to Canadian Embassy, P.O. Box 16129, S-103 23 Stockholm 16, Sweden.

Process and Apparatus for the Rapid Aerobic Fermentation of a Substance in a Nutrient Medium/333

Procédé et appareil pour la fermentation aérobie accélérée d'une substance dans un milieu nutritif/333

L'invention concerne un appareil perfectionné pour la fermentation aérobie accélérée d'une substance dans un milieu nutritif. L'appareil selon l'invention qui comprend, comme tous les appareils de ce type, une cuve de fermentation équipée d'un agitateur et pourvu d'un système d'oxygénation interne, est caractérisé en ce qu'il comprend en outre un système additionnel d'oxygénation externe à la cuve, lequel système comprend un dispositif aérateur et des moyens pour faire circuler le milieu nutritif de la cuve vers le dispositif aérateur et vice-versa. Le principal avantage de l'appareil selon l'invention est qu'il permet de maîtriser à la fois les problèmes d'agitation, d'aération et de foisonnement généralement rencontrés dans l'utilisation de tels appareils pour la croissance de micro-organismes en culture submergée, avec comme résultat une rapidité de croissance supérieure et un épuisement plus complet du milieu nutritif. Écrire à: **BREVET 1,163,937**, Les Services de Consultation D&B Plus Limitée, 3^e étage, Place Lauzanne, 400, boul. Labelle, Laval (Québec) H7V 2S7 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Jig for Assembling Table Tops/333

Gabarit de montage pour dessus de tables/333

A jig for assembling table tops such as picnic table tops, which have a plurality of similar elongated rectangular top members secured together in aligned fashion on transverse bottom members. The jig comprises a frame to which are secured transverse member holders having bottom and side surfaces to receive and secure in parallel position at predetermined spaced locations the transverse members in such a way that the upper surfaces of the transverse members in position in the transverse member holders lie in the same plane. The jig also comprises alignment means secured to the frame to align one end of the top members when in assembly position on the transverse members in the transverse member holders. An alignment means is rigidly secured to the frame at a position which will properly orient a top member with respect to the transverse

member by abutment of one of the top member's side surfaces against this alignment means. In instances where spaced top members are required for the table, spacer pins are provided of a diameter similar to the desired spacing between adjacent top members. These pins are laterally moveable in channels secured to the frame so that a pin is received towards each end between the sides of each pair of adjacent top members. The jig is provided with a pair of clamping jaws movable laterally in the assembly plane of the top members and means to move the clamping jaws to bear against the outer sides of the outer top members and to move the top members transversely into final assembly position and hold them in that position for assembly. The jig according to the present invention partially automates what has previously been a strictly manual job of aligning and securing top table members to transverse members. Write: **PATENT 1,164,020**, Richard Braceland, Box 793, Barry's Bay, Ontario K0J 1B0 and send copy of your initial correspondence to Licensing Opportunities (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Shell Fish Opener/333

Instrument pour ouvrir les mollusques/333

The invention is concerned with a device for opening a shell fish of the type having two shell halves normally held closed against each other by a muscle. The device of the invention comprises means for supporting the shell fish with one shell half resting substantially flat on the support means, means on the support means for providing an abutment for the shell fish, and link means pivotally connected to the abutment means so as to permit pivotal movement of a free end portion of the link means toward and away from the support means. The device further includes lever means pivotally mounted intermediate the ends thereof to the free end portion of the link means so as to permit pivotal movement of one end of the lever means toward and away from the abutment means, and wedge means hinged to the other end of the lever means and adapted to contact the shell fish at the edge defined between the shell halves substantially opposite the abutment means. Movement of the aforesaid one end of the lever means in a direction away from the abutment means forces the wedge means to penetrate between the shell halves and thereby separate the shell halves to open the shell fish sufficiently to cause rupture of the muscle. Write: **PATENT 1,164,166**, Laurent Thibault, 1341 de la Montagne, St. Nicolas, Quebec G0S 2Z0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Animal Trap/333

Piège d'animaux/333

A trap of the type including generally C-shaped jaws pivotally mounted for movement between the open or set position and the closed or sprung position includes a base plate for supporting the jaws and the usual pawl, trigger lever and trigger plate; a generally U-shaped spring for biasing the jaws closed; and a semi-cylindrical fence integral with the base plate which, when the trap is placed on the mouth of a burrow, defines a tunnel extending in essentially the same direction as such mouth; i.e., the tunnel is substantially coaxial with the mouth of the burrow for directing the animal into the trap and preventing the entry of larger animals into the trap. Write: **PATENT 1,164,211**, Edward Cesar, P.O. Box 334, Granum, Alberta T0L 1A0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Plant Growing Unit, Method and System/333

Unité, système et méthode de culture des plantes/333

A plant growing unit which is generally flexible and comprises upper and lower compartments formed of flexible polyethylene or other plastics materials. The flexible upper compartment constitutes a plant root-ball container open for upward growth of a plant when placed in the container, while the flexible lower compartment constitutes a reservoir for water optionally containing added fertilizer nutrients or other dissolved materials. Level restricting means, such as at least one aperture in the walls of the lower compartment, is provided for establishing a maximum level of water in the reservoir which in use of the unit results in an air space between the water level and the root-ball of a plant when in the container. The unit also has one or more openings between the upper and lower compartments allowing root growth from the container to the reservoir. Write: **PATENT 1,164,213**, Bonar Horticulture Limited, Carlyle House, Carlyle Road, Kirkcaldy, Fife, Scotland and send copy of your initial correspondence to Commercial Division, Canadian Consulate, Ashley House, 195 West George Street, Glasgow G22HS, Scotland.

Pump Jack Drive Apparatus/333

Dispositif moteur pour chevalet de pompage/333

A pump jack drive apparatus includes a pair of hydraulic cylinders connected to a walking beam of the pump jack for reciprocating the horsehead, and a pair of microswitches, or proximity switches which are closed by the walking beam at the limits of the stroke thereof for controlling such stroke. The cylinders are driven and controlled by a pump and control unit which includes a valve for feeding hydraulic fluid to one or the other of the hydraulic cylinders, a control cylinder for controlling the valve, and two solenoid operated control valves for controlling movement of the control cylinder in response to closing of the switches by the walking beam. Write: **PATENT 1,164,270**, Reginald D. Creamer, 228 Spring Haven Court, Airdrie, Alberta T0M 0B0 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

Apparatus Used for Stimulating the Respiratory System in Humans/333

Stimulateur de l'appareil respiratoire humain/333

Stimulateur de l'appareil respiratoire humain, comportant un corps formant un conduit d'air pourvu, à une extrémité, d'une embouchure apte à être portée à la bouche d'un utilisateur et d'une résistance monobloc montée à l'autre extrémité du conduit transversalement à celui-ci. Cette résistance est construite pour constituer une obstruction au passage d'air se déplaçant dans au moins un des deux sens d'écoulement d'air durant la respiration de l'utilisateur. Le corps, l'embouchure et la résistance constituent un ensemble intégré pouvant être transporté par la seule bouche de l'utilisateur. Le volume du conduit, entre l'embouchure et la résistance augmente ainsi, avantageusement, l'espace mort anatomique de l'utilisateur. Écrire à: **BREVET 1,164,304**, Jean-Yves Roy, 3104, boul. Lacordaire, Montréal (Québec) H1N 2N9 et faire parvenir copie de votre correspondance initiale à la Section des possibilités de licences (FOII), Bureau de l'innovation industrielle, ministère de l'Expansion industrielle régionale, Ottawa (Ontario) K1A 0H5.

Tool Centralizer/333

Dispositif d'insertion concentrique d'un outil/333

A device for centralizing a tool in a drill hole includes a hollow, generally cylindrical casing which contains an elongated cavity and a plurality of flexible fingers extending outwardly from the casing for properly positioning the casing in a drill hole. In use, the device is attached to a drill string beneath a tool to be centralized. The casing is defined by two threadedly interconnected elements, which together define the elongated cavity, with a rod slidable in the cavity. The rod includes holes for receiving the fingers. By pressing the rod downwardly in the cavity, the fingers are jammed against the bottom edges of apertures in the bottom tubular element. Thus, the device is relatively simple, and can readily be assembled and disassembled. Write: **PATENT 1,164,336**, Roy D. Hansen, 4403 - 14 Street, N.E., Calgary, Alberta T2E 6N3 and send copy of your initial correspondence to Licensing Opportunities Section (FOII), Office of Industrial Innovation, Department of Regional Industrial Expansion, Ottawa, Ontario K1A 0H5.

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Apparatus and Method for Combusting Carbonaceous Fuels Employing in Tandem a Fast Bed Boiler and a Slow Boiler/333

Appareil et méthode de combustion de combustibles carbonés à l'aide d'une chaudière à lit rapide et d'une chaudière lente à tandem/333

A fluid bed boiler and combustion method are provided having two zones. In the first, coal and make-up limestone are fed to a fast bed of limestone fluidized by air at high velocities wherein the coal undergoes combustion and the bed of limestone provides for the capture of the sulfur dioxide which results from the oxidation of the sulfur in the coal. The solids existing from the first zone are separated from the gases and flow into a "slow" bubbling bed, fluidized by air at a relatively low velocity in which bed are immersed arrays of heat exchange tubes. Additional heat transfer can be provided by supplying the fast bed combustor with water walls. Solids from the slow bed are recirculated to the bottom of the fast bed. The slow bed fulfills a number of functions in serving also as a solid reservoir and as a kind of stand pipe providing control and driving force for the circulation of the solid at a rate sufficient to establish the state of fast fluidization in the combustor. U.S. Patent 4,103,646. Reference Number ED1028-76-02.

Multiple Ring Inertial Energy Storage Wheel with Improved Inter-ring Connector/333

Roue à inertie à bagues multiples pour stocker l'énergie et pourvue d'un raccord amélioré entre les bagues/333

An inertial energy storage wheel constructed in accordance with the invention comprises a plurality of concentric, inertial energy storage rotor rings. A hub supports the innermost rotor so that its axis is vertically oriented. Means is provided for rotating the wheel about a vertical axis concentric with the axes of the rotor rings. A rotor spacer ring is disposed between each set of adjacent rotor rings for supporting the outer rotor of each set from the inner rotor of such set and for maintaining the rotors concentric while permitting their radial dilation when subjected to high rates of rotation about their common axis. U.S. Patent 4,058,024. Reference Number RP269-1.

Rotor Ring for Inertial Energy Storage Rotor/333

Bague rotor de rotor à inertie pour le stockage de l'énergie/333

This invention relates to rotor rings constructed from fiber composite materials and more particularly to fiber composite rotor rings that are provided with unreinforced end faces. U.S. Patent 4,150,582. Reference Number RP269-1.

High Strength Alumina Ceramic Product and Method of Forming/333

Méthode de façonnage et description d'un produit céramique très résistant à base d'alumine/333

A high strength ceramic product especially adapted for electrical porcelain insulators and including alumina, clay and flux. The alumina content is from 45-60% by weight of the ceramic body. The product is formed by conventional wet processing. By controlling the size of alumina and flux, a high modulus of rupture, in excess of 30,000 psi, is imparted to the fired ceramic product. U.S. Patent 4,183,760. Reference Number RP424.

Sliding Support for a Superconducting Rotor/333

Support coulissant pour rotor à supraconducteurs/333

In a superconducting generator rotor, the rotor includes a cylindrical outer rotor structure for resisting mechanical and electrical forces from fields in the stator and a coaxial supercooled inner rotor winding structure to provide high field intensity with no resultant current flow losses in the superconducting windings. These inner and outer rotor structures are rigidly connected against torsional and axial relative movement at one end of the rotor. At the opposite end of the rotor the sliding support connection is required. This sliding support permits relative axial movement of the inner rotor relative to the outer rotor during cool down. At the same time the sliding support resists slip and fretting corrosion during normal operating conditions all without relative torsional movement between the inner and outer rotor assemblies. The sliding support connection of the inner rotor to the rotating outer rotor and stub shaft of the generator power train is closed by a flexible diaphragm which has protruding axially therefrom a plurality of integrally attached fingers. These fingers, at an outside radial surface, bear into a complementary cylindrical cavity in the end of the stub shaft having female spline receiving concavities. The fingers on their inside dimension define a frustoconical mandrel, preferably loaded by a Belleville spring. During thermal axial excursion incident to cool down, the fingers by sliding into and out of the spline concavities in the stub shaft accommodate relative axial movement of the inner rotor relative to the outer rotor. During on-line operation of the rotor, the fingers maintain a positive and non-sliding fit with the stub shaft so that by positive outward pressure at the fingers, slip and fretting corrosion of the fingers and stub shaft is prevented. All necessary rotational flexure of the inner rotor is taken by the flexible diaphragm closing the inner rotor. U.S. Patent 4,178,777. Reference Number RP429-1.

Method and Apparatus for Cooling a Winding in the Rotor of an Electrical Machine/333

Méthode et dispositif de refroidissement des enroulements rotoriques des machines tournantes/333

Means for cooling a winding in the rotor of an electrical machine that is cooled by a flow of liquefied gas. The winding is covered by a heat conductive sheath that transfers the heat developed in the winding to a pool of the liquefied gas. The winding and conductive sheath are insulated by a thermal shield from sources of heat exterior to the winding. The winding and the conductive sheath have a support structure that is provided with cooling channels through which the liquefied gas flows. These channels allow the other components of the rotor to be cooled independently from the winding. U.S. Patent 4,277,705. Reference Number RP429-2.

Apparatus for Supporting a Stator Winding in a Superconductive Generator/333

Dispositif de support de l'enroulement statorique dans un alternateur à supraconducteurs/333

To provide a novel apparatus that overcomes the limitations and disadvantages of the prior art; to position and support a stator winding in a superconductive generator so that the high magnetic field generated by the superconductive field winding can be optimally utilized; to develop a winding support system for stator bars located in the air-gap of a superconductive winding that will withstand large torques and radial forces; to provide a winding support system that permits removal of the individual stator bars from the generator for either replacement or repair; and, a future object of the present invention is to provide a non-metallic winding support system that does not cause power loss due to the high magnetic field in the winding region. These and other objects are achieved by an apparatus for supporting a stator winding in an air-gap of a superconductive electrical generator. The apparatus includes a plurality of integral stator bars positioned in the air-gap between the yoke and the rotor, and a plurality of non-conductive supporting teeth that are interspaced between the stator bars. The supporting teeth are engaged by a plurality of wedge members that secure the stator bars in a rigid supporting arch. U.S. Patent 4,278,905. Reference Number RP429-2.

Stored Field Superconducting Electrical Machine and Method/333

Principe et méthode de construction d'un appareil électrique à supraconducteurs et à champ emmagasiné/333

To reduce the size and weight, to increase the efficiency, to lower the capital cost, and to provide greater stability in a superconducting electrical machine; to increase the magnetic flux density in a superconducting electrical machine and thereby increase the output power of the machine. The power density of either an electrical generator or a motor is proportional to the square of the average flux density at the armature; to eliminate conductor motion and training in the rotor of a superconducting electrical generator; to incorporate A-15, betatungsten structure, superconductors into electrical rotating machine. These materials not only permit operation at much higher levels of magnetic flux density but also permit more stable operation at the same field values as wound coil rotors using lower critical parameter materials (it should be understood that these A-15 materials are so brittle that they are not easily fabricated into wire and consequently have not heretofore been used in wirewound rotors); to trap a magnetic field for use in a superconducting electrical machine by using the armature coils of that machine; to eliminate all electrical leads to the rotor of a superconducting generator (these leads heretofore have been lossy since they are refrigerated and have required complex superconducting to normal transitions, and slipping assemblies). U.S. Patent 4,176,491. Reference Number RP429-77-7.

Circuit Interrupter Using Dielectric Liquid with Energy Storage/333

Interrupteur de circuit utilisant un liquide diélectrique à emmagasinage d'énergie/333

To provide an improved circuit interrupter which is capable of effectively operating at relatively high fault currents; to produce an interrupter where pressure variations are minimized; and, to provide a double flow interrupter having improved interruption. In accordance with the above objects there is provided a circuit interrupter using a dielectric fluid. The resultant arc formed in the nozzles from interrupting temporarily block the flow of the fluid in phase with current peaks and cause an incipient high pressure maximum. Extinguishment of the arc which occurs near zero causes an incipient low pressure minimum. Movable and fixed contacts are retained in at least a partially confined enclosure. Means are provided for introducing the dielectric fluid into the enclosure at a predetermined initial high pressure. Energy storage means are responsive to the high pressure fluid and changes in the fluid flow for smoothing the resultant pressure of the fluid by reducing the pressure maximum and increasing the pressure minimum. U.S. Patent 4,307,274. Reference Number RP478-1.

Gas Distributor for Fluidizing Beds/333

Distributeur de gaz pour lits fluidisés/333

A gas distributor for fluidizing a bed of particulate matter comprises an assembly of plates or sheets formed into troughs and into deflector baffles overlying the margins of adjacent troughs and arranged in longitudinal rows. The troughs and the baffles are spaced in a predetermined manner by struts or ribs, which are preferably flexible in the longitudinal direction to accommodate thermal stress. The spacing relationship defining the gas inlet and gas flow path of the troughs minimizes pressure drop across the distributor and through the bed fluidized at selected high superficial velocities while inhibiting undesired loss of particles, component erosion, and hot spot formation. U.S. Patent 4,115,929. Reference Number RP525-1.

Method of Removing Particulate Matter from Precipitator Plate/333

Méthode d'élimination de la matière particulaire des plaques des dépoussiéreurs/333

Used in electrostatic precipitators and fabric filters, this invention relates generally to electrostatic precipitators and like structures having plates for collecting particulate matter and to an improved method of cleaning particulate layers from such plates. The process depends on passing the suspended particles through an electric discharge area where ionization of the gas occurs. The ions produced collide with the suspended particles and confer on them an electric charge. The charged particles then drift toward an electrode plate of opposite polarity and are deposited on the plate where the electric charge is neutralized. U.S. Patent 4,276,056. Reference Number RP533-1.

Apparatus for Defrosting Low Temperature Heat Exchanger/333

Appareil pour dégivrage d'échangeur de chaleur à basse température/333

Used in heat exchangers and refrigeration units, the invention provides an efficient and reliable system for defrosting heat exchangers of heat pumps. The heat exchanger is mounted within an upright air duct fitted at its downstream end with a draw-through or suction fan to draw air vertically upward through the heat exchanger. The heat exchanger itself is mounted so that the air flows vertically past it. A defrost heater is positioned in the duct beneath an upstream end of the heat exchanger. The heater can be an electric resistance heater such as are commercially available under the trade designation CALROD in which electric resistance wires are insulated with magnesium oxide and disposed within flat metal tubes. This heater substantially evenly heats the air beneath the heat exchanger so that the air rises by convection upwardly through the exchanger during a defrost cycle. The heretofore common, relatively complicated and expensive reverse cycle defrost systems can be replaced with rugged, low cost, simple to install electric resistance heaters. U.S. Patent 4,191,026. Reference Number RP544-1.

Current Based Power Supply/333

Transformateur de courant/333

This invention relates to current based power supplies and particularly to an improved supply operable from a wide range current source taken from an AC power line. The power supply of this invention includes a multi-stage energy storage system capable of very fast turn-on speeds and operation over a wide range of input supply current levels. In monitoring the operating function of high voltage power supply lines (EHV) and for other purposes requiring equipment electrical power at locations remote from usual power source there is needed a remotely locatable electric power supply to provide voltage regulated power at low levels for electronic equipment. Such a power supply should be capable of being operated by magnetic (transformer) coupling to the power supply lines themselves using the line current exclusively as a power source. It is desired that the power supply have a start-up time (from a fully de-energized condition to full regulation) following an initiation signal, such as a current zero crossing relating to breaker close, of extremely short timing, for example, less than 150 microseconds at a current magnitude of approximately 4.0 per unit (p.u.) (where 1 p.u. = rated line current). The power supply should be able to maintain full regulation during its operation over an input current range of from 0.02 p.u. to over 40 p.u. where 1 p.u. of current depending upon the line given, may vary from a few hundred amperes to a few thousand amperes. Aside from the wide range of current input and high turn-on speed requirements, the power supply should also

be efficient and of a highly reliable design. Heretofore, a power supply meeting the foregoing requirements has not been available. U.S. Patent 4,173,039. Reference Numbers RP560/RP560-1.

Superconducting Hybrid Magnetic Flux Pump/333

Pompe à flux magnétique de construction hybride et à supraconducteurs/333

This invention is related to improvements in superconducting magnetic flux pumps and, more particularly, to a flux pump which, in operation, increases the rate of flux pumping minimizing the formation of counter-productive transient currents and by increasing the rate of entry and exit of flux into the superconducting circuit. U.S. Patent 4,096,403. Reference Number ED0563-75-15.

Transformer Noise Abatement/333

Réduction du bruit des transformateurs/333

The technology utilizes a unique noise shell consisting of close-fitting, tuned, sound-barrier panels mounted on the outside of a transformer tank. A noise reduction of 15 dBA can be accomplished when all sides of the transformer are insulated. Because sound spectra of similar transformers have been shown to be consistent, standardization of panels may be done. Cost savings possible with the noise shell versus conventional methods of noise suppression vary with transformer configuration and size. However, projections indicate the shell will cost 40-50% less than standard noise control. Reference Number RP579.

Electromagnetic Transducer (EMAT)/333

Transducteur électromagnétique (EMAT)/333

A magnet is used to create a static magnetic field adjacent to the surface of a conductive material. Unlike prior art electromagnetic transducers, periodicity in the magnetic field is obtained by the design of the static magnetic field rather than by the use of a meander type coil to create periodicity in the alternating magnetic field created by the current flow. Further, at any given time, current in the coil exposed to the static magnetic field flows in the same direction rather than in opposing directions as in conventional coils. U.S. Patent 4,127,035. Reference Number RP698-1.

Sulfur Hexafluoride (SF₆) Foamed Insulation/333

Isolant expansé à l'hexafluorure de soufre (SF₆)/333

This is a high dielectric foam material. SF₆ gas-filled polyurethane or epoxies are processed into a closed-cell foam material with dielectric properties significantly better than the starting resin material. The SF₆-foamed insulation is lightweight and exhibits a low-dielectric constant. The material is also less susceptible to internal partial discharges or dielectric breakdown resulting from microcavity-type imperfections. The material possesses the features of a gas dielectric (SF₆) and the lightweight properties of a foamed material. The material has the added feature of in-situ application. Reference Number RP749.

Voltage Regulator Utilizing a Static Var Generator with Half-Period Averaging and Saturating Type Firing Angle Control/333

Régulateur de tension utilisant un générateur statique de puissance réactive (vars) avec établissement de la moyenne sur une demi-période et commande par saturation de l'angle d'amorçage/333

This invention relates generally to voltage regulators for three phase voltage transmission, distribution or utilization lines. The subject matter of this invention relates more particularly to the utilization of static controlled VAR generators for providing voltage regulation. U.S. Patent 4,156,176. Reference Number RP750-1.

Reduction of Sulfur Dioxide with Recycled Coal/333

Réduction du dioxyde de soufre à l'aide de charbon recyclé/333

The present invention relates to the removal of SO₂ from an SO₂-containing off-gas, and its conversion to elemental sulfur. Steam and a SO₂-containing off-gas are introduced into a reactor containing a mixture of fresh and recycled coal, with the temperature of the reactor being maintained at a level sufficient to reduce the sulfur dioxide to elemental sulfur. While the amount of recycled coal, as a percentage of the total coal fed to the reactor, can vary widely, preferably from 30% to 90% of the coal fed to the reactor is recycled. More preferably, from 50% to 80% of the coal mixture is recycled coal. In a preferred embodiment of the present invention, granular coal, which is first screened to remove fines, is gravity fed into the reactor, with the flow of coal moving countercurrent to the flow of steam and SO₂-containing off-gas. The elemental sulfur that is removed from the reactor can be condensed. U.S. Patent 4,328,201. Reference Number RP784-2.

Heat Pump System with Improved Heat Transfer/333

Pompe à chaleur à transfert de chaleur amélioré/333

The heat transfer of a heat pump using the ground as a heat source or sink is improved by surrounding the underground heat pipe with soil containing a plurality of water-soaked absorbent particles to provide a jacket of high thermal conductivity. A preferred form of absorbent particles is a hydrophilic polymeric gel material. To minimize loss of water from the particles, after soaking with water, they may be coated with a water-impermeable film and then mixed with the soil. In an alternative embodiment, the particles are formed of flexible balloon-like bags filled with water without an absorbent core. Other ways to prevent loss of water from the soil surrounding the heat pipes include laying a water-impermeable film above the pipes, or completely surrounding them. U.S. Patent 4,042,012. Reference Number ED544-76-41B.

Turbine Rotor with Ceramic Blades/333

Rotor de turbine à aubes en céramique/333

An improved turbine rotor having a rotor disk, a plurality of circumferentially spaced ceramic rotor blades having roots, and a number of attachment pieces of high temperature metal for coupling the roots of the blades to the outer periphery of the rotor disk. The blades have roots which are received within grooves formed in the attachment pieces, and the attachment pieces are of a size and at locations on the rotor disk such that the blades are spaced from the rotor disk, and the rotor disk itself is effectively isolated from the hot gases which impinge on the ceramic blades to exert rotative forces thereon. U.S. Patent 4,093,399. Reference Number RP421-1.

Turbine Rotor with Pin Mounted Ceramic Turbine Blades/333

Rotor de turbine à aubes en céramique goupillées/333

To provide an improved turbine rotor for a gas turbine engine wherein the rotor has a plurality of turbine blades of ceramic material coupled by an approved attachment means to the outer periphery of a rotor disk so that the turbine blades will be positively secured to the rotor disk at all times notwithstanding the high rotational speeds associated therewith; to provide a turbine rotor of the type described wherein the blades are mounted by pins to intermediate attachment pieces which, in turn, are secured to the outer periphery of a rotor disk so as to prevent movement of the blades away from the rotor disk yet the rotor disk itself is shielded by the attachment pieces and the blades of the blades from the harmful effects of the high-temperature gases to which the blades are subjected when in use; and, to provide a turbine rotor of the aforesaid character wherein each pair of blades of the rotor is received between a pair of axially spaced, radially extending end walls of a respective attachment piece and a pin extends through the walls and through a recess formed by the engagement of spaced projecting parts on the bases of the two blades to prevent movement of the blades away from the attachment piece yet the blade base shields the rotor disk from the hot gases of the turbine. U.S. Patent 4,084,922. Reference Number RP421-1.

Ceramic Rotor Blade Having Root with Double Curvature/333

Aube de rotor en céramique à emplanture doublement incurvée/333

An invention to provide an improved turbine blade having a root for insertion into a groove of an attachment piece for coupling the blade to a turbine disk, wherein the root and the groove are configured to provide an improved distribution of load transfer to minimize the stresses and thermal expansion in the root and thereby minimize structural damage to the root and provide a long operating life for the blade. This invention also provides a blade and an attachment piece of the type described, wherein the root of the blade has a curvature both in the longitudinal and transverse directions with the root curvature in both directions being less than that of the surface portions of the attachment piece defining the groove so that contact between the root and the surface or a complaint pad in the groove will initially be at a point. But such contact will become a growing surface as the blade and the attachment piece rotate to thereby assure an improved distribution of load substantially uniformly between the root and the surface. U.S. Patent 4,169,694. Reference Number RP421-1.

Metal Oxide Varistor and Method/333

Principe et méthode de fabrication d'un varistor métal-oxyde/333

A method of forming a varistor body, including the initial step of mixing zinc oxide powder with impurities which include silicon carbide. The resultant mixture is then sintered at a temperature in the range of from approximately 1100°C. to approximately 1250°C. to form a substantially solid varistor body. The resultant sintered varistor body comprises zinc oxide together with a relatively small amount of impurities. The impurities include silicon carbide to a concentration of from 0.01 to 1.0 molar percent of the varistor body. U.S. Patent 4,272,411. Reference Number RP425.

Metal Oxide Varistor Manufacture/333

Fabrication d'un varistor métal-oxyde/333

A nonlinear voltage variable resistor which is produced by molding and sintering metallic oxide mixtures, and, more particularly, a method of manufacturing a high voltage metal oxide varistor. U.S. patent 4,296,002. Reference Number RP425.

Acoustic Partial Discharge Detector/333

Détecteur acoustique de décharges partielles/333

An invention to provide the necessary electrical isolation while maintaining high Acoustic Emission signal sensing capability. This is achieved by means of an electrically insulating acoustic waveguide. It has been found that the lowest useful frequency associated with the acoustic emission signal is approximately 60 kHz. The waveguide, therefore, must transmit high frequency ultrasonic signals above 50 kHz with no distortion and a minimum of attenuation while also providing adequate electrical insulation. These conditions can be achieved using a glass rod. This rod must be efficiently acoustically coupled to both the capacitor tank and the sensing crystal at the other. As the acoustic impedances of the rod and crystal are significantly different, it is necessary to provide a matching piece which not only matches the diameter of the rod to the diameter of the sensing crystal, but also exhibits an acoustic impedance midway between the glass and crystal. This is achieved by means of a Plexiglas cone. As the capacitor rod interface efficient acoustic coupling can be achieved by means of a rod tip made from either solid polyurethane or zinc filled PVC. This not only enables acoustic coupling to be achieved without the use of conventional ultrasonic couplants but also protects the rod from mechanical damage. To protect the rod transducer assembly from mechanical damage and also to provide a rugged assembly for field use, the device maybe encased in a fiberglass tube. U.S. Patent Pending. Reference Number RP426-1.

Flexible Coupling or Rotor Elements of a Superconducting Generator/333

Accouplement souple pour les éléments du rotor d'un alternateur à supraconducteurs/333

A flexible coupling for connecting pairs of concentric elements in a superconducting rotor. The coupling is preferably constructed of a relatively thin ring and it provides the sole support between the rotors at one or both ends of the superconducting rotor. When used to connect the inner rotor to the insulating shield, the ring is constructed of a material that retains flexibility at temperatures down to at least about 100° K. The ring may be laminated to increase its flexibility and may comprise a number of joint ring segments. Spaced apart securing devices alternately affix the ring to the rotors which it connects. The spacing between the securing devices is sufficient to permit deflections of the ring in an axial direction. U.S. Patent 4,117,357. Reference Number RP429-1.

Cooled Spiral Winding for Electrical Rotating Machine Stator/333

Enroulement hélicoïdal refroidi pour le stator d'une machine électrique tournante/333

A winding for an electrical rotating machine in which the phase coils are formed in a spiral pancake configuration. Each coil comprises electrical conductor means formed in a plurality of series-connected concentric turns. The coils lie in outwardly spiraling paths and are circumferentially spaced about the winding with the turns of adjacent coils interleaved in radially overlapping relationship. The windings configuration is such that the stator shield provides strong support for the coils, particularly at the end connections. Smooth and uniform spaces are provided between the coils which permit placement of insulation of the type that would enable the machine to operate at very high voltage ratings. U.S. Patent 4,151,433. Reference Number RP429-1.

Bibliography

1984 International Business Opportunities Conference/333

The National Governors' Association and The Federation of International American Clubs are co-sponsoring the: 1984 INTERNATIONAL BUSINESS OPPORTUNITIES CONFERENCE in Washington, DC, May 28-June 1, 1984. The purpose of the conference is to serve as a catalyst for business expansion by small and medium-sized manufacturers through cooperative arrangements with overseas partners. The conference will feature two general program elements: 1. Panel Discussions and Workshops 2. Individual Contacts. For registration and hotel forms as well as additional information please contact the U.S. FCS Officer at the nearest U.S. Embassy or Consulate.

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Bibliographie

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La National Governors' Association et la Federation of International American Clubs parrainent cette conférence qui aura lieu à Washington, D.C., du 28 mai au 1^{er} juin 1984. Ses organisateurs souhaitent qu'elle catalyse l'expansion des affaires menées par le PME par le biais d'ententes de coopération conclues avec des partenaires étrangers. Sont prévus au programme d'une part des séances de débat et des ateliers et d'autre part des périodes de contacts personnels. Les inscriptions, les réservations d'hôtel et toute demande de renseignements doivent être envoyées au U.S. FCS Officer de la plus proche ambassade ou du plus proche consulat des États-Unis.

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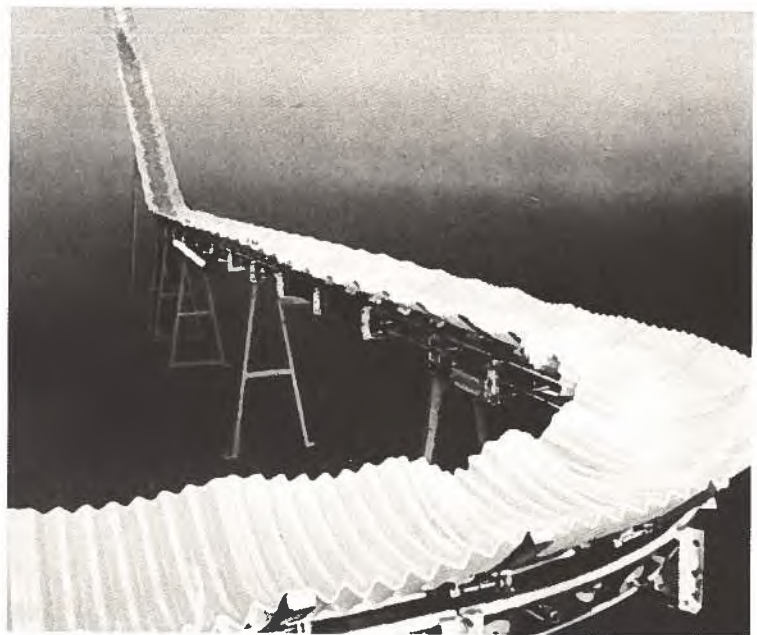
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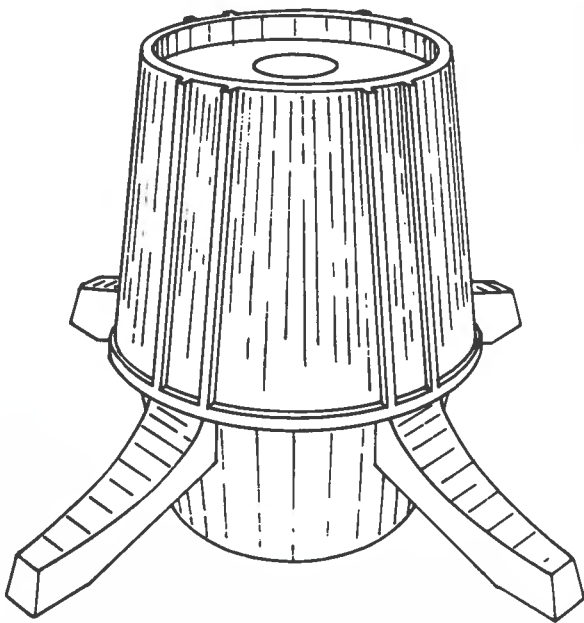
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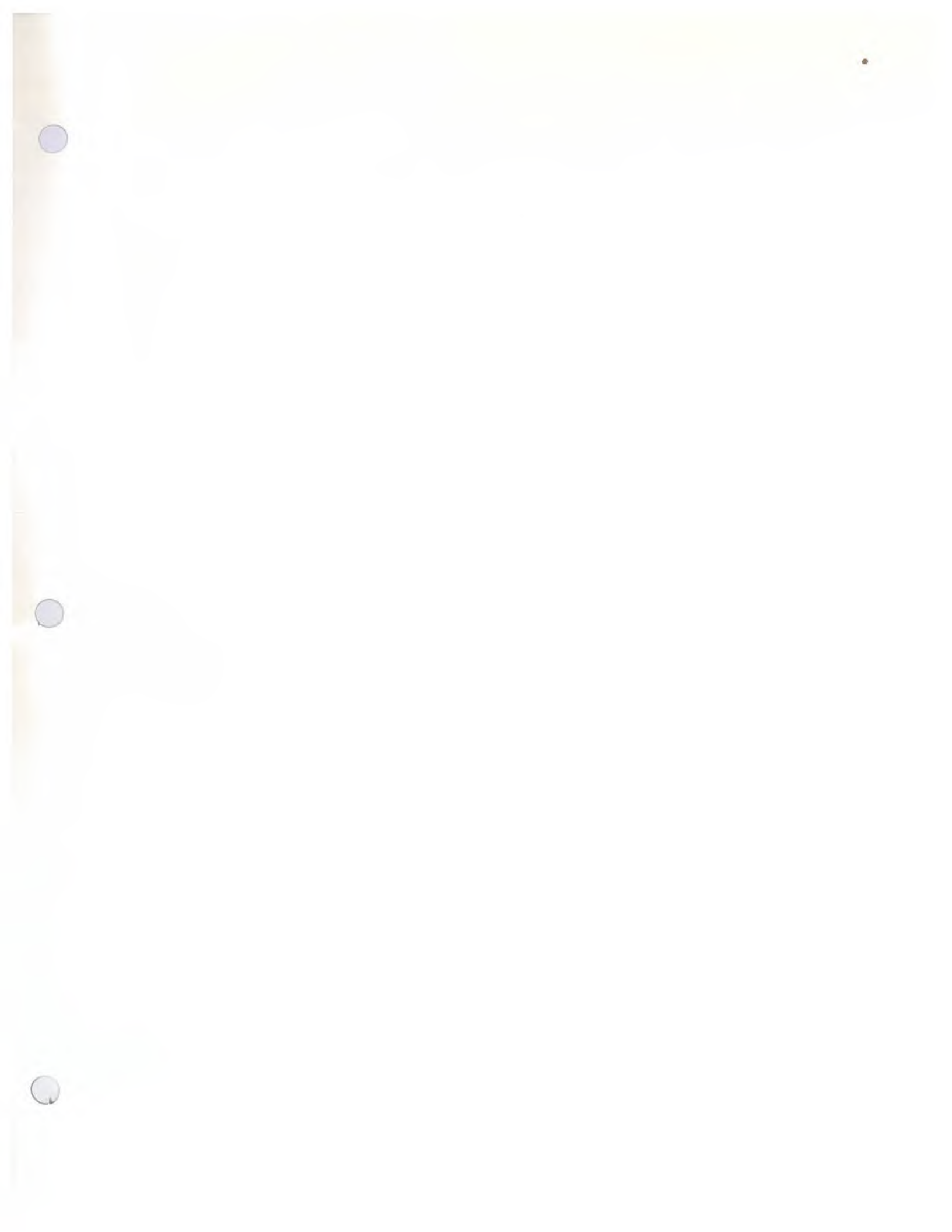
Modular Wood Construction System (See page 6)
Système de construction modulaire en bois (Voir page 6)



Materials Handling Equipment (See page 7)
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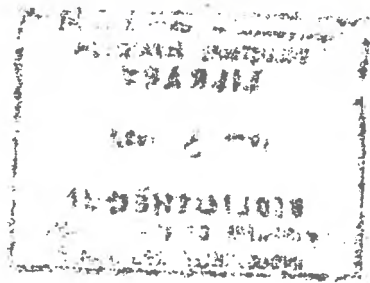


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