

### Summaries of UK Patent Applications

**Phosphoric Acid Esters of Polyethers.** GB 2196 632A. Filed 23 October 1987, published 5 May 1988. Applicants — Sandoz Ltd, Basle, Switzerland.

Phosphoric acid partial esters derived from a block ethoxylated and propoxylated C<sub>9–16</sub> aliphatic alcohol are described. These materials are useful as wetting agents, especially in the pre-treatment of cellulosic textile materials.

**Nail-Strengthening Cosmetic Compositions.** GB 2196 978A. Filed 25 September 1987, published 11 May 1988. Applicants — Plough Inc. (Incorporated in USA — Delaware), Memphis, USA.

A cosmetic composition comprising an amount of glyoxal sufficient to strengthen nails in admixture with a substantially non-aqueous conventional nitrocellulose-based nail preparation is described.

**Gene Fusion Comprising  $\beta$ -Glucuronidase.** GB 2197 653A. Filed 4 November 1987, published 25 May 1988. Applicant — R. A. Jefferson, Cambridge, England.

A gene fusion product comprises a gene coding for  $\beta$ -glucuronidase, e.g. the *uid A* gene of *E. coli*, and can be used in the introduction, monitoring and regulation of expression of a desired gene in hosts such as plants, animals, yeasts etc.

**Glycoprotein Derived from the Basal Cells of the Epidermis and Monoclonals and Polyclonals which Bind Said Glycoprotein.** GB 2197 871A. Filed 30 October 1987, published 2 June 1988. Applicants — Centre International de Recherches Dermatologiques, Volbonne, France.

A nonkeratinous glycoprotein present on the apicolateral face of the basal cells of the epidermis is described. It has a molecular weight of 165 kilodaltons and can be used as a marker in the differentiation of keratinocytes.

**Pressure Sensitive Adhesive.** GB 2198 441A. Filed 3 December 1987, published 15 June 1988. Applicants — Smith and Nephew Associates Companies plc, London.

An adhesive product is described for use on wounds. This comprises a backing layer of a moisture vapour transmitting film and a layer of pressure adhesive containing at least 30% by weight acrylic adhesive and at least 30% by weight of alginate. The alginate makes the layer water absorbable (see also GB 2199 040A).

**Semi-Permeable Membrane having Low Affinity for Proteins.** GB 2198 972A. Filed 9 December 1987, published 29 June 1988. Applicants — Pall Corporation, New York.

A porous polymeric medium having low protein affinity is provided, this is useful as a membrane for filtering protein-containing materials. The medium is prepared by crosslinking *in situ* a hydroxyl group containing polymer on the surface of a porous polymeric substrate. The latter could be hydroxypropyl cellulose (see also GB 2199 331A).

**Process for Producing Shaped Articles from Vegetable Particulate Materials.** GB 2199 333A. Filed 31 December 1986, published 6 July 1988. Applicants — Dai-Ichi Kogyo Seiyaku Co. Ltd, Kyoto, Japan.

A process for producing sheets or other shaped articles from vegetable particulate materials, including sawdust, soybean meal, grain hulls, is described. The process involves applying a solution or dispersion of a urethane prepolymer, shaping the resultant mass, then curing and drying the shaped articles.

**Peptide Derivatives.** GB 2199 829A. Filed 9 October 1987, published 20 July 1988. Applicants — Sandoz Ltd, Basle, Switzerland.

Sugar modified peptide derivatives have a longer duration of biological activity than non-sugar modified peptides. They contain at least one sugar residue attached to an amino group of an amino acid residue by a coupling other than a direct N-glycosidic bond. Mono or oligo-saccharides can be used and the derivatives can be made by an Amadori or Heyns rearrangement (see also GB 2199 831A).

**Preparation Method of Immobilized Enzyme or Immobilized Microbe.** GB 2199 832A. Filed 14 January 1988, published 20 July 1988. Applicants — Kabushikikaisha Kibun, Tokyo, Japan.

An immobilized enzyme or microbe is prepared by adding the enzyme or microbe to an aqueous solution of sodium alginate with an M/G ratio of 0.01–0.8. The solution is then gelled with barium or strontium ions.

This method has the advantage that the strength of the immobilizing gel is improved while the inherent activity and characteristics of the enzymes or microbes are not inhibited. It is claimed that the gels formed are stronger than those prepared with calcium ions and less susceptible to chelating agents.