



Summaries of UK Patent Applications

Alkaline Cellulase Extracted *Bacillus*. GB 2232 983A. Filed 3 May 1990, published 2 January 1991. Applicants — Kao Corporation, Tokyo, Japan.

Cellulases having an optimum pH range in the alkali region and stability over a wide pH range are disclosed, along with micro-organisms producing these enzymes and the manufacturing process. The enzymes are not adversely affected by surfactants and can therefore be used in detergent formulations.

Absorbing Immunoglobulin. GB 2232 984A. Filed 14 August 1987, published 2 January 1991. Applicants — Showa Denko Kabushiki Kaisha, Tokyo, Japan.

An adsorbent composed of porous beads of uncrosslinked or cross-linked chitosan is used for adsorbing immunoglobulin from human plasma. The chitosan may be crosslinked with a dicarboxylic acid or halide thereof.

Glass-like-Polysaccharide Abrasive Grit. GB 2232 992A. Filed 5 March 1990, published 2 January 1991. Applicants — Ogilvie Mills Ltd, Quebec, Canada.

Abrasive particles which are not as hard as most conventional abrasives are described. These are generally prepared from starches often by extrusion. Additionally cross-linked polysaccharide materials and starches having a substantially occluded water content are described.

A Process for the Recovery of Polysaccharides. GB 2232 993A. Filed 11 May 1990, published 2 January 1991. Applicants — Jungbunzlauer Aktiengesellschaft, Wien, Australia.

A process of recovering polysaccharides in granular free-flowing form is described. The polysaccharides are produced by the bacteria *Xanthomonas* or *Arthrobacter*. After precipitation and washing the polysaccharide particles are coarsely separated from the washing liquid kept in motion with the addition of water and subsequently dried preferably with continued motion.

Method for Bonding Lignocellulosic Material with Gaseous Esters. GB 2233 335A. Filed 2 May 1990, published 9 January 1991. Applicants — Borden Inc., New Jersey, USA.

A method of bonding lignocellulosic material under heat and pressure together with steam and a gaseous ester is described. The ester has a boiling point of less than 85°C and is generally an alkyl formate, propionate or acetate with a total of 2–4 carbon atoms.

Films/sheets of Hyaluronic Acid. GB 2235 204A. Filed 31 July 1990, published 27 February 1991. Applicants — Chisso Corporation, Osaka, Japan.

A method for producing a readily water-soluble film or sheet of hyaluronic acid or a hyaluronate is described. This involves forming a layer of an aqueous solution and freeze-drying the layer in vacuo. A readily water-soluble cosmetic sheet contains hyaluronic acid/hyaluronate together with magnesium-L-ascorbil phosphate.

Curcumin Complexed on Water Dispersible Substrates. GB 2236 320A. Filed 16 August, published 3 April 1991. Applicants — Kalamazoo Holdings Inc., Michigan, USA.

Stable complexes of curcumin with water soluble branched chain and cyclic polysaccharides are described. Polysaccharides include starch, gum arabic, pectins and cyclodextrins. The complex is formed under alkaline conditions. It is used as a colourant in the food and beverage industry.