

## SUMMARIES OF UK PATENT APPLICATIONS

**Process for Preparing Agglomerated Fibrous Cellulose Ion-exchange Composition.** GB 2085449A. Filed 21 July 1981, published 28 April 1982. Applicants – Standard Brands Inc., New York, USA.

The preparation of a fibrous ion exchange cellulose composite is described. The cellulose is first agglomerated with a hydrophobic polymer and then derivatised to impart ion exchange properties. Particular uses include the immobilisation of glucose isomerase.

**Clarification of Xanthan Gum.** GB 2085904A. Filed 5 October 1981, published 6 May 1982. Applicants – Institut Français du Pétrole, Rueil-Malmaison, France.

The clarification and purification of xanthan gum broths by treatment with basidiomycete cellulase is described. The treatment is conducted under conditions where xanthan gum itself is not hydrolysed.

**Cyclodextrin Inclusion Complexes and Processes for their Preparation.** GB 2086405A. Filed 15 October 1981, published 12 May 1982. Applicants – Chinoin Gyógyszer és Vegyszeti Termékek Gyára RT, Budapest, Hungary.

The preparation of inclusion complexes of cyclodextrins and strong inorganic oxyacids are described. These are stable, crystalline materials.

**Dispensible Hydrophilic Polymer Compositions.** GB 2086923A. Filed 25 August 1981, published 19 May 1982. Applicants – NL Industries Inc., New York, USA.

A polymer composition for thickening aqueous media is described. The composition consists of (i) a water dispersible particulate organic polymer preferably selected from the group consisting of cellulose derivatives, water dispersible starch derivatives and polysaccharide gums; (ii) a solvating agent which is a water miscible polar organic liquid such as glycerol; (iii) an organic diluting agent such as a liquid aliphatic or aromatic hydrocarbon.

The composition is of particular use in well servicing fluids and will thicken heavy brines. It does not require high temperatures or high shear rates for preparation.

**Method for Preparing Alkaline Corrugating Adhesive.** GB 2086924A. Filed 8 October 1981, published 19 May 1982. Applicants – National Starch and Chemical Corp., New Jersey, USA.

A method for preparing a starch based adhesive for use in the manufacture of corrugated board is described.

A high amylose starch with a degree of substitution of alkali labile groups preferably in the range 0.035–0.30 is gelatinised by heating at a temperature of at least 80°C. The starch carrier is then incorporated into an alkaline corrugating adhesive which regenerates the amylose present.

**Improved Polymer-Containing Fluid and an Oil-Recovery Method Using the Fluid.** GB 2086960A. Filed 10 November 1980, published 19 May 1982. Applicants – Texaco Development Corp., New York, USA.

The addition of a low molecular weight aromatic organic compound to oil recovery fluids to protect the polymer in such fluids from bacterial attack, and improve injectability and reduce plugging, is described. The polymer used is often a polysaccharide such as xanthan gum.

**An Assay Method for Amylase Activity.** GB 2088052A. Filed 7 October 1981, published 3 June 1982. Applicants – Toyo Jozo Kabushiki Kaisha, Shizuoka-ken, Japan.

An assay method for amylase activity is described where the substrate used is a glucose polymer having a modified reducing terminal glucose-residue or is a cycloglucose polymer (cyclodextrin).

**Anhydride Group- or Carboxyl Group-Containing Graft Copolymers of Polysaccharide Esters.** GB 2088393A. Filed 3 December 1980, published 9 June 1982. Applicants – Bayer Aktiengesellschaft, Leverkusen, West Germany.

Graft copolymers are obtained by free-radical grafting in solution on a substrate of a polysaccharide ester of aliphatic  $C_1$ - $C_5$ -monocarboxylic acids. The graft copolymers are useful for the production of films, foils and fibres.

**Lipopolysaccharide Containing Compounds as Immunotherapeutic Agents for Tumours.** GB 2088399A. Filed 28 November 1980, published 9 June 1982. Applicants – Chisato Maruyama, Tokyo, Japan.

A lipopolysaccharide containing arabinomannan as the polysaccharide base with ester-linked fatty acids bonded to it may be obtained by alkali extraction and purification of cells derived from human tubercule bacillus. Anti-tumour activity is claimed.

**Fire Resistant Coating.** GB 2088400A. Filed 23 November 1981, published 9 June 1982. Applicant – Kin-Chang Lee, New Territories, Hong Kong.

A fire resistant coating consisting of a mixture of an alkali metal silicate and starch in a liquid carrier is described.

**Additives for Use in Aqueous Solutions in the Recovery Stage of an Oil or Gas Well Fracturing Process.** GB 2089362A. Filed 26 November 1981, published 23 June 1982. Applicants – Ago Chemicals SpA, Como, Italy.

A modified galactomannan for use in the recovery stage of an oil or gas well fracturing process is described. This additive comprises an ethylcyano derivative of a galactomannan. A process for making this material by reacting the galactomannan with acrylonitrile in the presence of an alkaline catalyst is also described.

**Film-forming Composition and the Method of Making Cellulose Ester Film.** GB 2089363A. Filed 22 June 1981, published 23 June 1982. Applicants – Eastman Kodak Co., New York, USA.

Incorporation of a polyethoxylated phosphate ester in a cellulose ester film forming medium promotes stripping of the film from the surface on which it is cast. This is of value in the photographic industry.

**Stabilized Starch Composition.** GB 2089825A. Filed 5 November 1981, published 30 June 1982. Applicants – General Foods Corp., New York, USA.

A stabilised starch which is resistant to degradation when stored under dry acidic conditions is described. It is prepared by drying the starch slurry in the presence of a buffer such as trisodium citrate. It is useful in products such as dry dessert mixes.