

# **Summaries of UK Patent Applications**

Anticoagulants from E-Coli Saccharide. GB 2254083A. Filed 28 March 1991, published 30 September 1992. Applicants—Italfaramaco, S.p.A., Milano, Italy, and Max Planck Institut Fur Immunobiologie, Stubeweg, Germany.

Anticoagulants are prepared from the K-5 saccharide of E-Coli by N-deacetylation e.g. using hydrazine/ hydrazine sulphate. They may also be N-sulphated and/or C5-epimerized and also O-sulphated.

#### Gelling System. GB 2255705A.

Filed 26 September 1990, published 18 November 1992. Applicant—Mars G.B. Ltd, Slough, UK.

Alginate and/or pectate gelling compositions that set on heating are described. The formulation contains a sparingly soluble calcium salt (preferable calcium sulphate dihydrate) and a sequestrant (preferably sodium or potassium pyrophosphate). Gelation occurs on heating above 50°C.

## Process for Producing Cellulose Acetate. GB 2257142A. Filed 30 June 1992, published 6 January 1993.

Applicant—Daicel Chemical Industries Ltd, Osaka,

A process for producing cellulose acetate from a hard, low grade pulp sheet having a high sheet density is described.

# Protecting Vital Substances. GB 2257358A.

Filed 11 June 1992, published 13 January 1993. Applicant—Whell Inter AG Zug, Switzerland.

Encapsulation of bioactive substances such as enzymes, vitamins and microorganisms is described. The examples include the use of both guar and carob (locust bean) gum in the protection of enzymes.

## Electroluminescent Device. GB 2257828A.

Filed 4 March 1992, published 20 January 1993.

Applicant—BKL Inc, Pennsylvania, USA.

Cyanoalkylated pullulan polymeric resins and their admixture with other cyanoalkylated resins are used as dielectric binders in an electroluminescent device.

# Starch Pulp and its Preparation for the Manufacture of Paper and Cardboard. GB 2258251A.

Filed 20 July 1992, published 3 February 1993.

Applicant—Novamont S.p.A., Milano, Italy.

A starch pulp comprising starch pastes, which can be mixed with cellulose fibres for making paper or card-

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board, is described. The pulp is produced by preparing an aqueous starch suspension of concentration between 5 and 40% by weight, jet cooking at a temperature between 90 and 180°C, mixing with a coagulating agent such as ammonium sulphate and subjecting the pulp to a 'maturing' stage.

## Stable Aqueous and Cellulase Protease Compositions. GB 2258655A.

Filed 12 August 1992, published 17 February 1993.

Applicant—Sandoz Ltd, Basle, Switzerland.

A stable aqueous enzyme preparation comprising cellulases and proteases is described. The preparation is buffered in the pH range 4-6 and comprises an oxygencontaining water soluble organic solvent (e.g. ethylene glycol, propylene glycol or glycerol). The composition may be utilised in the after treatment of mixed fabrics.

#### Modified Antibodies. GB 2259093A.

Filed 15 May 1991, published 3 March 1993.

Applicant—Central Blood Authorities, Hertfordshire, UK.

Modified forms of antibodies are described having specifities against polysaccharide antigenic determinants. The antibodies carry modified glycosyl groups and on storage in aqueous solution at 4°C produce substantially no precipitate.

#### Production of Chitin/Chitosan. GB 2259709A.

Filed 27 August 1992, published 24 March 1993.

Applicant—British Textile Group, Manchester, UK.

A method for the production of chitin/chitosan comprises harvesting stipes from mushrooms and processing the harvested stipes e.g. with alkali to remove nonchitinous material.

## Indigestible Dextrin. GB 2259917A.

Filed 28 August 1992, published 31 March 1993.

Applicant—Matsutani Chemical Industries Company Ltd, Hydro-ken, Japan.

This long patent describes the production of an indigestible dextrin, which is prepared by adding hydrochloric acid to corn starch and heating the corn starch at 120-200°C using an extruder. The dextrin contains up to 50% of 1-4 glycosidic linkages and at least 60% of an indigestible component. Substantial details on the analysis, nutritional properties and use in food formulations are given.

## Indigestible Dextrin. GB 2601397A.

Filed 29 September 1992, published 7 April 1993. Applicant—Matsutani Chemical Industries Company Ltd, Hydro-ken, Japan.

Indigestible dextrin is prepared by first heating a corn starch-hydrochloric acid mixture to obtain a pyro-

dextrin. The pyrodextrin is then hydrolysed with  $\alpha$ -amylase and glucoamylase to remove at least half of the glucose formed from the resulting hydrolysate. The residue comprises at least 90% of the indigestible component. As in the previous patent, substantial details of composition and food uses are given.