Carbohydrate Polymers 2 (1982) 159–162

SUMMARIES OF UK PATENT APPLICATIONS

Preparation of Fructose Polymers, Fructose and Glucose. GB 2077269A. Filed 2 June 1981, published 16 December 1981. Applicants – CPC Inc., New Jersey, USA.

A sucrose containing substrate is subjected to the concurrent action of fructosyl transferase and glucose to yield a mixture of fructose polymers, glucose and fructose.

Fibrous Material for Tobacco Smoke Filter. GB 2077737A. Filed 8 May 1981, published 23 December 1981. Applicants – BAT Cigarettan, Fabriken GmbH, Hamburg, Germany.

A material for tobacco smoke filters consisting of cellulose fibres containing amino groups is prepared by converting cellulose or partially acetylated cellulose to a reactive intermediate and then reacting this with compounds such as ammonia, amino acids, various amines, etc.

Multicolour Coating Composition. GB 2078243A. Filed 8 June 1981, published 6 January 1982. Applicants – J. D. Mann, California, USA.

A multicolour paint consisting of discrete coloured globules dispersed in a continuous phase of a different colour is described. The dispersed phase is prepared by reacting two polyelectrolytes of opposite charge and further reacting with crosslinking reagents such as boron and titanium compounds. The continuous phase is controlled such that the whole composition approaches Newtonian flow behaviour. A claimed advantage of the composition is that it can be applied by brush or roller.

A range of polysaccharides and modified polysaccharides can be used in the disperse and continuous phase.

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Processed Starch, Process for Preparing Same and Use of Same in Medicines. GB 2078767A. Filed 9 June 1981, published 13 January 1982. Applicants – Asahi Kasei Kogyo KK, Osaka, Japan.

A starch which is useful as a disintegrant in pharmaceutical products is described. The starch has been partially gelatinised so that birefringence is lost, but granule shell is retained so the starch granules retain their individual integrity and are not cold water soluble.

Modified Glucosominaglycans Having Antilipemic Activity and Essentially Devoid of Anticoagulant Activity. GB 2078768A. Filed 15 June 1981, published 13 January 1982. Applicants – Italfarmoco S.p.a., Milan, Italy.

A succinyl derivative of desulphated heparin is described which has antilipemic activity.

Preparation and Purification Process. GB 2079290A. Filed 9 June 1981, published 20 January 1982. Applicants – Fisons Ltd, London, England.

A process for producing a polysaccharide-producing enzyme is described. The enzyme is prepared by a fermentation process and can be purified by absorbing the crude enzyme on an anionic resin and removing with a sugar containing eluant.

Cellulose Food Filler. GB 2079578A. Filed 23 June 1981, published 27 January 1982. Applicants – Société des Produits, Nestle SA, Switzerland.

Powdered cellulose is mixed with a flavour agent and/or a gelling agent, water is added and the mixture then heated to remove most of the water. It is claimed that the cellulose treated has advantages in flavour and is less gritty than conventional cellulose food fillers.

Non-combustible Materials Comprising Carbon Black. GB 2079766A. Filed 17 July 1981. Published 27 January 1982. Applicants – Charles Romaniec, West Yorkshire, England.

A method of producing a non-combustible material for use in protective clothing is described. A precursor consisting of carbon black particles, a suspension of alginic acid or an alkaline earth metal silicate and optionally rayon is extruded, solidified and cured.

Stable Suspensions of Water Soluble Polymers in Hydrocarbon Liquids. GB 2079768A. Filed 14 July 1981, published 27 January 1982. Applicants – Institut Français du Petrole, Rueil-Malmaison, France.

Stable suspensions are described which consist of a water soluble polymer dispersed in a liquid hydrocarbon medium and also contain as a thickening agent an alkali metal or alkaline earth metal salt of a fatty acid. Suitable polymers include polyvinyl alcohol, cellulose derivatives and xanthan or scleroglucan gum.

The suspension can be used in enhanced oil recovery.

Process for Purification of Nitrocellulose. GB 2080309A. Filed 23 July 1981, published 3 February 1982. Applicants – Hercules Inc., Wilmington, USA.

A process for the purification of nitrocellulose is described.

Water Loss Reducing Additives for Salt Water Cement Slurries. GB 2080812A. Filed 3 July 1981, published 10 February 1982. Applicants – Halliburton Company, Oklahoma, USA.

Very low molecular weight carboxymethylhydroxyethylcellulose polymers are used as additives for salt water cement slurries to lower water loss from the slurries when in contact with water permeable earth formations.

A Microbiological Process for the Production of a Polysaccharide and its Cationic Salt and Their Use in Depressing Serum and Liver Cholesterol Levels and the Atherogenic Index. GB 2080818A. Filed 29 May 1981, published 10 February 1982. Applicants – Showa Sangyo Co. Ltd, Tokyo, Japan.

The invention relates to a process for the production of polysaccharides by culturing *Bacillus polymyxa* No. 271 in a culture medium. The polysaccharide has a molecular weight of more than 200 000. The salt of the polysaccharide with a cation having a degree of substitution greater than 0·2 has a remarkable effect in depressing serum and liver cholesterol levels.

Coated Water-soluble Polymers, Their Manufacture and Their Use to Prepare Aqueous Solutions for Use in Enhanced Oil Recovery. GB 2081278A. Filed 23 July 1981, published 17 February 1982. Applicants – Institut Français de Petrole, Rueil-Malmaison, France.

A composition that can coat solid particles of any water soluble polymer including polysaccharides is described. The composition forms an inert protective layer that is solid at room temperature but disperses easily when the polymer is dissolved in hot water. The composition consists of a paraffinic type product.

Production of Microbial Polysaccharides. GB 2082189A. Filed 17 August 1981, published 3 March 1982. Applicants – Shell Internationale, The Hague, Holland.

A system for producing polysaccharides from immobilised microorganisms is described. The microorganism is supported on a porous particulate inert support with a pore size greater than 0·5 μm. A nutrient medium is passed through the immobilised system, and a polysaccharide containing medium is withdrawn. The process is particularly useful with microorganisms which produce polysaccharides in the stationary phase of the growth cycle.

Absorbent Composition. GB 2082614A. Filed 3 August 1981, published 10 March 1982. Applicants – National Starch and Chemical Corp., New Jersey, USA.

A dry, solid water-swellable absorbent composition prepared by binding together a water insoluble absorbent polymer (polysaccharide graft polymer or crosslinked or ionically complexed anionic polyelectrolyte) and an extender material such as uncrosslinked cellulose derivatives, starch, certain clays, etc., is described.

Cellulose Derivatives Capable of Forming Inclusion Complexes. GB 2083821A. Filed 4 August 1981, published 31 March 1982. Applicants – Chinoin Gyogyszer es Vegyeszeti, Budapest, Hungary.

Derivatives made by coupling cellulose and a cyclodextrin with the appropriate epoxy compound are described. The derivatives have uses as absorbents, e.g. in chromatography and purification of waste waters, etc.