

Summaries of UK Patent Applications

Dibenzo[b,d]pyran and Phenanthroline Derivatives and Their Pharmaceutical Formulation. GB 2133405A. Filed 1 December 1983, published 25 July 1984. Applicants – Chinoin Gyogyszer es Vegeszeti Termeker Gyara Rt, Budapest, Hungary.

Novel 2,6-di-*O*-methyl- β -cyclodextrin complexes are described. Biological activity is claimed.

Fermentation Process for the Production of Polysaccharides. GB 2134126A. Filed 30 November 1982, published 8 August 1984. Applicants – Imperial Biotechnology Ltd, London, UK.

Polysaccharides such as xanthan gum are produced by culturing the appropriate microorganism in a two-stage process. In the first stage the nutrient composition is adjusted to support microorganism growth without polysaccharide biosynthesis. In the second stage conditions are such that polysaccharide biosynthesis occurs with little or no growth of the microorganism. The objective is to reduce the requirement for oxygen at a time when the culture medium has its maximum viscosity and oxygen transfer is most difficult.

Thermal Energy Storage Medium. GB 2134532A. Filed 2 August 1983, published 13 August 1984. Applicants – Edeco Holdings Ltd, London, UK.

Xanthan gum by itself or mixed with a galactomannan is used to suspend an inorganic salt that is capable of transforming from one phase to a less hydrated phase absorbing latent heat and releasing this latent heat on the reverse transformation which generally occurs on cooling.

A nucleating agent may be added to the formulation or it can be omitted when the composition can be stored at ambient temperature until activated to release latent heat.

Concentrated Suspensions of Water Soluble Polymers. GB 2134910A. Filed 13 February 1983, published 22 August 1984. Applicants – Rhone-Poulenc Specialities Chimiques, Courbevoie, France.

Concentrated suspensions of high molecular weight water-soluble polymers containing an inorganic diluent that does not solvate the polymer, a liquid swelling agent and a water-soluble low-molecular weight polymeric additive carrying carboxylic functional groups, are described. The suspensions can be applied in the preparation of dilute aqueous thickening solutions particularly for the oil industry. Examples with xanthan gum are given.

A Process for the Preparation of Aqueous Non-sedimenting Dispersions. GB 2135689A. Filed 4 August 1983, published 5 September 1984. Applicants – 'Sallai Imre' MGT SZ, Besnyo, Hungary.

Starch and urea are added together to suspend aqueous dispersions of solid particles. Preferred starch levels are 2–10% and it is desirable to have greater quantities of urea than starch. Examples relating to fertiliser suspensions are given.

A Lipopolysaccharide and a Process for its Preparation. GB 2137649A. Filed 5 March 1984, published 10 October 1984. Applicants – Chisato Maruyama, Tokyo, Japan.

A physiologically active lipopolysaccharide composed of D-arabinose and D-mannose is described. It is prepared on an industrial scale by culturing artinomycetes and related bacteria and extracting the obtained cells with a non-ionic surface active agent followed by purification.

Release Agents for Cellulose Containing Food Casings. GB 2137901A. Filed 7 March 1984, published 17 October 1984. Applicants – Teepak Inc., Illinois, USA.

Cellulose casings used for example in sausage manufacture are coated with a composition containing 3% by weight arabinogalactan. This improves the handling properties of the casings during stuffing and also improves the food release characteristics.

Alkylsulfonated Polysaccharides and Mortar, and Concrete Mixes Containing Them. GB 2138014A. Filed 1 March 1984, published 17 October 1984. Applicants – Boston SpA, Milan, Italy.

The sulphonation of polysaccharides such as starch and cellulose is described. One use of the materials is to improve the flowability of concrete mixes allowing them to be prepared with lower water contents.

Novel Pesticidal Compositions and Their Use. GB 2138293A. Filed 27 March 1984, published 24 October 1984. Applicants – Sandoz Ltd, Basle, Switzerland.

A novel cyclodextrin inclusion complex which comprises cyclodextrin and an insect growth regulator selected from hydropene, methoprene and kinoprene is described.

Apparatus and Method for the Continuous Production of Aqueous Polymer Solutions. GB 2138829A. Filed 11 July 1983, published 31 October 1984. Applicants – Marathon Oil Co., Ohio, USA.

Apparatus for on-site production of water soluble polymers is claimed. The particular use is in secondary and tertiary recovery of oil with partially hydrolysed polyacrylamides.

A Polysaccharide RDP Substance. GB 2139240A. Filed 19 March 1984, published 7 November 1984. Applicants – Sapporo Breweries Ltd and Daicel Chemical Industries Ltd, Japan.

A polysaccharide containing glucose as the sole sugar with α -1,4 and α -1,6 linkages is extracted from rice bran. About 800 mg of polysac-

charide is obtained from 25 kg of bran. The polysaccharide is shown to be biologically active having, for example, antitumour properties and acting as a host defence agent against infectious disease.

Compositions for Prevention of Undesired Adsorption on Surfaces. GB 2139635A. Filed 14 May 1984, published 14 November 1984. Applicants – National Research Development Corporation, London, UK.

Surfaces exposed to aqueous environments are contacted with a solution containing a polymer mixture comprising a polymer with reactive groups, capable of bonding with the surface to be treated, and hydrophobic groups, and a second polymer containing a hydrophilic chain and hydrophobic groups.

Colonisation of microorganisms on teeth, ships hulls and heat exchangers can be prevented.

Improvements in or Relating to a Process for Microbial Production of Polysaccharides. GB 2139638A. Filed 30 March 1984, published 14 November 1984. Applicants – Perstorp AB, Perstorp, Sweden.

A new process for microbial production of polysaccharides by means of the bacterium *Zoogloea ramigera* strain 115 is described. A low viscosity in the cultivation medium is achieved with the polymer being present in the form of capsules.

An Absorbent for Adsorbing thereonto an Autoantibody and/or Immune Complexes from a Body Fluid. GB 2140424A. Filed 30 March 1984, published 28 November 1984. Applicants – Asahi Kasei Kogyo Kabushki Kaisha, Osaka, Japan.

A material for removing an autoantibody and/or immune complexes from blood plasma is described. In the examples agarose and cross-linked polyvinyl alcohol are reacted with either a compound having both hydrophobic and negative charge producing groups, e.g. 7-amino-(1,3)naphthalene disulphonic or with two compounds one of which contributes hydrophobicity and the other a negative charge. In the final product the ratio of the effective number of negative charges to the number of hydrophobic 'members' should be greater than one.