Carbohydrate Polymers **7** (1987) 83–85

Summaries of UK Patent Applications

Formation of Solid Polymeric Material. GB 2171411A. Filed 11 February 1986, published 28 August 1986. Applicants — Gerald Hallworth, Lancashire, England.

A solid flexible polymeric material filled with sand is described. It is formed by solidifying a water based latex. The sand particles are stabilised prior to solidification by xanthan gum. The material is used as a carpet underlay or backing.

Method of Purifying Blood Coagulation Factor VIII. GB 2172000A. Filed 6 March 1986, published 10 September 1986. Applicants — Central Blood Laboratories Authority, Hertfordshire, England.

A method for the precipitation of fibrinogen and fibronectin from blood plasma fractions, especially cryoprecipitate, is described. Precipitation is achieved by the addition of a sulphated polysaccharide, especially heparin.

Excipient Useful in Compression Molding and Process for Preparing Same. GB 2172006A. Filed 8 March 1985, published 10 September 1986. Applicants — Freund Industrial Co. Ltd, Tokyo, Japan.

Excipients are inert substances mixed with powders or granules which are to be molded by compression. A mixture of hydroxypropyl starch and cellulose powder is described which gives molds of high hardness and disintegrability and is also surprisingly free flowing. The material can be prepared by spray drying aqueous dispersions of the polysaccharide mixture.

A Method of Stabilizing a Fracturing Fluid and a Stabilized Fracturing Fluid. GB 2172007A. Filed 15 January 1986, published 10 September 1986. Applicants — Freund Industrial Co. Ltd, Tokyo, Japan.

Either 2-mercaptobenzimidazole or 2-mercaptobenzothiazole is added to fracturing fluids containing guar gum or its derivatives in order to prevent degradation at high temperatures. The fracturing fluid is given enhanced viscosity stability.

Powdered Mobility Control Polymer for Thickening Aqueous Solutions. GB 2172008A. Filed 27 February 1986, published 10 September 1986. Applicants — Exxon Production Research Company, Texas, USA.

The rate of dissolution of thickeners such as scleroglucan and xanthan gum is considerably increased if these materials are first mixed with a dissolving agent such as sodium lignosolfonate.

Isoprenoidamine Derivatives. GB 2172286A. Filed 17 March 1986, published 17 September 1986. Applicants — Shionogi Seiyaku Kabushiki Kaishi, Osaka, Japan.

A range of novel isoprenoidamine derivatives is described. These compounds can form complexes with cyclodextrins and may be used in the treatment of ulcers.

Isolating Modified Hyaluronic Acid. GB 2172295A. Filed 20 January 1986, published 17 September 1986. Applicants — Biomatrix Inc., New Jersey, USA.

The patent discloses hylan which is a chemically modified hyaluronic acid containing small amounts (0·005–0·05% by weight) of aldehyde crosslinking groups covalently bonded to the hyaluronic acid molecular chains. This modification can take place *in situ* in animal tissues by treating with a reaction mixture containing an aldehyde. Compared with native hyaluronic acid, the modified material has much improved rheological properties.

Process for Preparing Aqueous Gel and Use Thereof. GB 2172891A. Filed 24 March 1986, published 1 October 1986. Applicants — Hoechst Gosei Kabushiki Kaisha, Tokyo, Japan.

The patent describes a process for preparing a gel which has excellent clarity and a high resistance to syneresis at low and high temperatures. A further advantage is that heat is not required in the preparation procedure. The process involves mixing a water soluble acetoacetylated high molecular weight compound which can be based on starch or cellulose amongst others, with a crosslinking agent such as metal alkoxide and water. Uses in the perfume industry and as a metal working lubricant are mentioned.

Metal-Containing Cellulose Matrix. GB 2173201A. Filed 3 April 1986, published 8 October 1986. Applicants — Kenneth Gedd, Somerset, England.

A cellulose matrix containing kinetically labile ions (e.g. copper (0)) may be prepared by reducing a complex comprising kinetically labile metal ions held within a deprotonated cellulose network. Uses include as supported catalysts materials and when charred for gas adsorption.