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(54) Title: METHOD OF SYNTHESIS OF SUBSTITUTED HEXITOLS SUCH AS DIANHYDROGALACTITOL

(57) Abstract: The present invention provides an efficient method of synthesizing and purifying dianhydrohexitols such as dianhydrogalactitol. In general, as applied to dianhydrogalactitol, the method comprises: (1) reacting dulcitol with a concentrated solution of hydrobromic acid at a temperature of about 80° C to produce dibromogalactitol; (2) reacting the dibromogalactitol with potassium carbonate in t- butanol to produce dianhydrogalactitol; and (3) purifying the dianhydrogalactitol using a slurry of ethyl ether to produce purified dianhydrogalactitol.



WO 2012/024368 A2