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(56) Documents Cited:

WO 2008/114021 A1 **WO 2008/058035 A1**
WO 2006/085082 A1
J. MICROBIOL. METH. Vol. 58, 2004, CLELAND D. ET AL.: "Glycine betaine as a cryoprotectant for procaryotes", Pages 31-38
CRYOBIOLOGY, Vol. 24, 1987, MCGANN L.E. & WALTERSON M.L.: "Cryoprotection by dimethyl sulfoxide and dimethyl sulfone", Pages 11-16
APPL. ENVIRONM. MICROBIOL. Vol. 65, 1999, COSQUER A. ET AL.: "Nanomolar levels of dimethylsulfofropionate, dumethylsulfonioacetate and glycine betaine....", Pages 3304-3311
APPLIED MICROBIOL, Vol. 22, 1971, BERGE T.O., JEWETT R.L. & BLAIR W.O.: "Preservation of enteroviruses by freeze-drying.", Pages 850-853
NATURE, Vol. 4932, 1964, GREIFF D., RIGHSTEL W.A & SCHULER E.E.: "Effects of freezing, storage at low temperature, and drying by sublimation in vacuo.....", Pages 624-625
CRYOBIOLOGY, Vol. 46, 2003, HUBALEK Z.: "protectants used in the cryopreservation of microorganisms", Pages 205-229
Stabilitech: "Stabilitech Technology", Innovations in health, (2009-11-19) Retrieved from the internet

(58) Field of Search:

INT CL **A61K, C12N**
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(54) Title of the Invention: **Stabilisation of viral particles**
Abstract Title: **Stabilisation of viral particles**

(57) A method for preserving viral particles comprising: (a) providing an aqueous solution of (i) viral particles, (ii) optionally one or more sugars, and (iii) a compound of formula (I) or a physiologically acceptable salt or ester thereof and/or a compound of formula (II) or a physiologically acceptable salt or ester thereof; and (b) drying the solution to form a composition incorporating said viral particles.