

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
8 February 2007 (08.02.2007)

PCT

(10) International Publication Number  
**WO 2007/014435 A1**

(51) International Patent Classification:  
A61L 2/22 (2006.01) A61L 2/20 (2006.01)

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2000 (AU).

(21) International Application Number:  
PCT/AU2006/001113

(22) International Filing Date: 4 August 2006 (04.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2005904181 4 August 2005 (04.08.2005) AU  
2005904196 4 August 2005 (04.08.2005) AU  
2005904198 4 August 2005 (04.08.2005) AU  
2006900748 15 February 2006 (15.02.2006) AU

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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP,  
KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT,  
LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA,  
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC,  
SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ,  
UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,  
RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED AEROSOL

(57) Abstract: A nebulant suitable for sterilization comprising finely divided liquid droplets suspended in a gas, said droplets includ-  
ing a solute, which is advantageously hydrogen peroxide and a solvent, for example water, wherein the droplets have a concentration  
of greater than 60 wt% of solute and an average diameter of less than 1.0 micron, preferably less than 0.8 microns. Sterilization  
using the nebulant may be carried out in suitably adapted apparatus by nebulising a solution comprising a sterilizing agent in a sol-  
vent to form a nebulant of finely divided particles of the solution in a gas stream, said solution including a solvent having a lower  
boiling point than the sterilizing agent; subjecting the nebulant to energy of a kind and for a duration sufficient to vaporize solvent  
in preference to sterilizing agent, whereby to increase the concentration of the agent in the nebulant particles; removing the solvent  
vaporized from the gas stream at or above atmospheric pressure and, if necessary, cooling the nebulant to below 70° C; and exposing  
a surface to be sterilized to the nebulant of concentrated sterilizing agent for a time sufficient to sterilize the surface.



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