

(43) International Publication Date
31 October 2013 (31.10.2013)

(51) International Patent Classification:

A61M 11/06 (2006.01) A61M 16/04 (2006.01)
 A61M 11/02 (2006.01) A61M 15/08 (2006.01)
 A61M 15/00 (2006.01) A61M 16/00 (2006.01)
 A61M 25/00 (2006.01) A61B 5/03 (2006.01)
 A61M 31/00 (2006.01) A61B 5/00 (2006.01)

(21) International Application Number:

PCT/EP2013/057744

(22) International Filing Date:

12 April 2013 (12.04.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12165234.1 23 April 2012 (23.04.2012) EP

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: METHOD AND SYSTEM FOR THE ADMINISTRATION OF A PULMONARY SURFACTANT BY ATOMIZATION

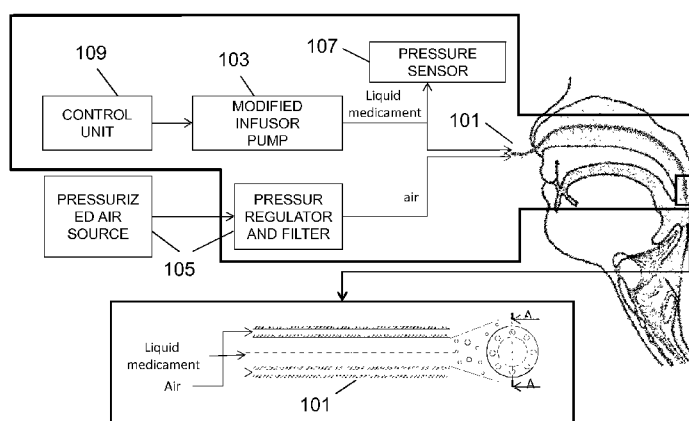


Fig. 1

(57) Abstract: The method and system according to preferred embodiments of the present invention allows optimizing the dispensing of aerosol medicaments. In particular the system according to a preferred embodiment of the present invention allows the administration of an exogenous pulmonary surfactant to very young patients (e.g. preterm neonates). A catheter (101) conveys atomized surfactant directly to the retro-pharyngeal region in order to increase efficiency of the medicament administration without being invasive: this is particularly important for very young patients, such as pre-term born neonates suffering from neonatal Respiratory Distress Syndrome (nRDS). It is possible to couple the catheter with a rigid scaffolding (e.g. metallic) to increase stiffness of the device and to improve easiness of positioning operations. In a preferred embodiment of the present invention the delivery of the atomized medicament is done by means of an air blasting technique.