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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*

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(54) Title: COMPOSITIONS AND METHODS FOR TREATING EMPHYSEMA

(57) Abstract: The present invention features compositions and methods for treating emphysema by reducing the amount of force the fibers in the lung (*e.g.*, the collagen and elastin fibers in the walls of the alveoli) must bear. More particularly, in one embodiment, the invention features a pharmaceutically acceptable composition comprising a lipid that, when applied to an enlarged alveolus (*e.g.*, an alveolus having a diameter substantially larger than (*e.g.*, 5, 10, 20, 50 or 100 % or more than) the average alveoli in a healthy patient (*i.e.*, a patient with no discernable lung disease), exerts a surface tension within the alveolus that substantially reduces the stress on fibers within the alveolus when inflated by a normal inspiration. The composition can display a γ^* of about 30 to about 70 dynes/cm.

WO 2003/078579 A3