



- (51) International Patent Classification:
A61M 5/46 (2006.01) *A61M 5/31* (2006.01)
- (21) International Application Number:
PCT/CA2013/050074
- (22) International Filing Date:
31 January 2013 (31.01.2013)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
12153248.5 31 January 2012 (31.01.2012) EP
- (71) Applicant: **TRICHOSCIENCE INNOVATIONS INC.**
[CA/CA]; Suite 2020 - 401 West Georgia Street Van-
couver, British Columbia, V6B 5A1 (CA).
- (72) Inventors: **HOFFMANN, Rolf**; In den Eschmatten 24,
79117 Freiburg (DE). **HOHLRIEDER, Martin**; Im Letten
1, A-6800 Feldkirch (AT).
- (74) Agents: **SILVER, Gail C.** et al.; Borden Ladner Gervais
LLP, World Exchange Plaza, 100 Queen Street, Suite
1100, Ottawa, Ontario K1P 1J9 (CA).
- (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).

Declarations under Rule 4.17:

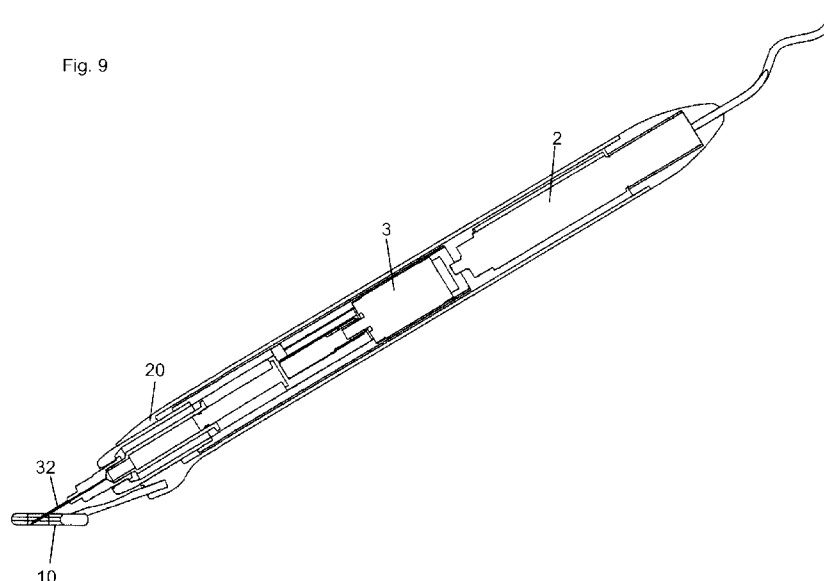
— *of inventorship (Rule 4.17(iv))*

Published:

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

(54) Title: INJECTION DEVICES

Fig. 9



(57) Abstract: The invention relates to an injection device which comprises an application element, at least one injection needle, an injection needle housing, a drive system for the injection movement, and a retraction system, wherein a substance is injected during the retraction movement of the injection needle.