

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 January 2001 (18.01.2001)

PCT

(10) International Publication Number
WO 01/03605 A1

(51) International Patent Classification⁷: **A61D 1/02**

(21) International Application Number: PCT/EP00/05671

(22) International Filing Date: 19 June 2000 (19.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
VE99A000029 7 July 1999 (07.07.1999) IT

(71) Applicants (for all designated States except US): **POULTRY VACC. S.A.S. DI ZERMOGLIO LORENZO & C.** [IT/IT]; Via Borgo Cavalli, 34, I-31100 Treviso (IT). **A.M.B.S.R.L.** [IT/IT]; Via S.D. Savio, 3, I-36060 Romano D'Ezzelino (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZERMOGLIO, Lorenzo** [IT/IT]; Via Borgo Cavalli, 34, I-31100 Treviso (IT). **ARTUSO, Angelo** [IT/IT]; Via S.D. Savio, 3, I-36060 Romano D'Ezzelino (IT).

(74) Agent: **PIOVESANA, Paolo**; Corso del Popolo, 70, I-30172 Venezia Mestre (IT).

(81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, DZ, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW.

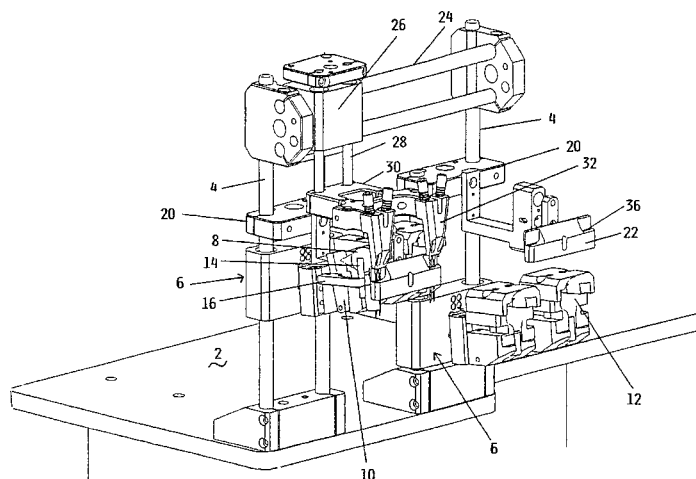
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

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

(54) Title: AUTOMATIC MACHINE FOR VACCINATING CHICKS AND SIMILAR BIRDS



(57) Abstract: An automatic machine for the multiple vaccination of chicks and similar birds, characterised by comprising at least one pair of side-by-side holders (10), each arranged to receive a chick (8) to be vaccinated, each holder comprising: a seat (12) into which the head of the chick (8) to be vaccinated is manually inserted, means (14) for automatically locking the chick's head inserted into said seat (12), a presser (22) acting on the chick to stabilize that neck portion into which the injection is to be effected, means for vertically moving, relative to said presser member, said seat (12) in which the head of the chick is inserted and locked, means for automatically operating said presser (22) on termination of said relative movement, at least one needle (24) mounted on a member (30) movable relative to the stabilized chick between said seat (12) and said presser (22), for its insertion into the chick's neck below the skin, and means for returning said needle (34), said presser (22) and said locking means (14) after the injection has been effected, to enable the chick (8) to fall spontaneously onto an underlying collection means.