PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C07K 14/22, C12N 15/31, A61K 39/02, G01N 33/569 — A2

(11) International Publication Number: **WO 99/58563**

(43) International Publication Date: 18 November 1999 (18.11.99)

(21) International Application Number: PCT/GB99/01473

(22) International Filing Date: 11 May 1999 (11.05.99)

(30) Priority Data:
9810084.5 11 May 1998 (11.05.98) GB

(71) Applicant *(for all designated States except US)*: CORTECS (UK) LIMITED [GB/GB]; Newtech Square, Deeside Industrial Park, Deeside, Flintshire CH5 2NT (GB).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: CRIPPS, Allan, William [AU/AU]; 133 Lambrigg Street, Farrer, ACT 2607 (AU). KYD, Jennelle [AU/AU]; 6 Buggy Crescent, McKellar, ACT 2617 (AU).

(74) Agents: CHAPMAN, Paul, William et al.; Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ (GB).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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
Without international search report and to be republished upon receipt of that report.

(54) Title: MORAXELLA CATARRHALIS PROTEINS

(57) Abstract

Novel antigens of *B. catarrhalis* are provided, together with their use in vaccines as well as methods of diagnosis and/or detection.