

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 October 2011 (06.10.2011)

PCT

(10) International Publication Number
WO 2011/123773 A1

(51) International Patent Classification:
A01N 43/00 (2006.01) *A61P 33/00* (2006.01)

(21) International Application Number:
PCT/US2011/030930

(22) International Filing Date:
1 April 2011 (01.04.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/320,559 2 April 2010 (02.04.2010) US

(71) Applicant (for all designated States except US): **MERIAL LIMITED** [US/US]; 3239 Satellite Blvd., Duluth, GA 30096 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ROSENTEL, Jr., Joseph K.** [US/US]; 10675 Branham Fields Road, Johns Creek, GA 30097 (US). **TEJWANI, Monica** [US/US]; 47 Putnam Road, Monmouth Junction, NJ 08852 (US). **DAS-NANDY, Arima** [IN/US]; 243 Washington Crossing Pennington Road, Titusville, NJ 08560 (US).

(74) Agent: **JARECKI-BLACK, Judy**; 3239 Satellite Blvd., Duluth, GA 30096 (US).

(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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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: PARASITICIDAL COMPOSITIONS COMPRISING MULTIPLE ACTIVE AGENTS, METHODS AND USES THEREOF

(57) Abstract: This invention relates to compositions for combating ectoparasites and endoparasites in animals, comprising at least one 1-arylpirazole, at least one macrocyclic lactone, at least one insect growth regulator, and at least one anthelmintic compound in combination with a pharmaceutically acceptable carrier. This invention also provides for an improved method for eradicating, controlling, and preventing parasite infections and infestations in an animal comprising administering the compositions of the invention to the animal in need thereof.



WO 2011/123773 A1