

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
10 September 2010 (10.09.2010)(10) International Publication Number
WO 2010/101821 A1

(51) International Patent Classification:

A01N 25/28 (2006.01) A01N 57/16 (2006.01)
A01N 57/00 (2006.01) A01P 7/00 (2006.01)

(21) International Application Number:

PCT/US2010/025755

(22) International Filing Date:

1 March 2010 (01.03.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/157,339 4 March 2009 (04.03.2009) US

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(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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, 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:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

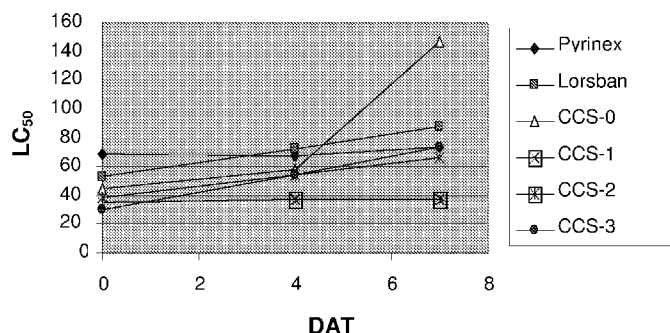
— with international search report (Art. 21(3))

(54) Title: MICROENCAPSULATED INSECTICIDE FORMULATIONS

FIG. 1

Plot of LC₅₀ (ppm of Chlorpyrifos) Values Versus DAT, Determined for various Novel Microcapsule and Control Formulations of Chlorpyrifos Tested For Efficacy Against Beet Army Worms (LAPHEG).

Capsule Biology (LAPHEG)



(57) Abstract: Various microencapsulated insecticide formulations for the control of pests such as aphids and beet army worm. These formulations exhibit excellent knock-down activity towards both chewing and non-chewing pests as LD50 values for toxicity in female rats in the range of about 2,500mgKg⁻¹. Some of these formulations include a wall comprised of a polymer formed, for example, by an interfacial polycondensation of a water soluble monomer and a water insoluble monomer, which at least partially surround an organophosphate insecticide. In some aspects the organophosphate in the microcapsule is chlorpyrifos. The microcapsule have a diameter in the range of about 2 to about 25 micron and the wall has a thickness in the range of about 5 to about 25 nanometers.