



(51) International Patent Classification:

A01N 43/40 (2006.01) A01N 43/78 (2006.01)
 A01N 43/70 (2006.01) A01N 43/707 (2006.01)
 A01N 43/88 (2006.01) A01N 37/22 (2006.01)
 A01N 37/34 (2006.01) A01N 43/58 (2006.01)
 A01N 47/30 (2006.01) A01N 47/32 (2006.01)
 A01N 43/66 (2006.01) A01N 43/82 (2006.01)

(21) International Application Number:

PCT/US2013/051297

(22) International Filing Date:

19 July 2013 (19.07.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/675,089 24 July 2012 (24.07.2012) US
 13/840,488 15 March 2013 (15.03.2013) US

(71) Applicant: **DOW AGROSCIENCES LLC** [US/US];
 9330 Zionsville Road, Indianapolis, IN 46268 (US).

(72) Inventors: **YERKES, Clara**; 4571 South State Road 47,
 Crawfordsville, IN 47933 (US). **MANN, Richard**; 1828
 South 550 East, Franklin, IN 46131 (US). **SCHMITZER,
 Paul**; 7690 North Whittier Place, Indianapolis, IN 46250
 (US). **SATCHIVI, Norbert**; 3100 Cherub Court, Carmel,
 IN 46074 (US).

(74) Agent: **BICKLEY, Patrick, M.**; Faegre Baker Daniels
 LLP, 300 North Meridian Street, Suite 2700, Indianapolis,
 IN 46204 (US).

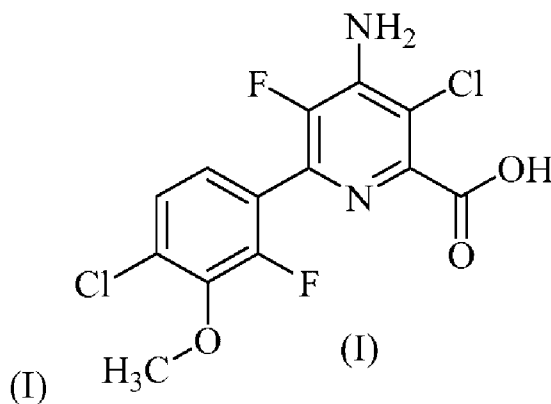
(81) Designated States (unless otherwise indicated, for every
 kind of national protection available): AE, AG, AL, AM,
 AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,
 BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
 DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
 HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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,
 KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished
 upon receipt of that report (Rule 48.2(g))

(54) Title: HERBICIDAL COMPOSITIONS COMPRISING 4-AMINO-3-CHLORO-5-FLUORO-6-(4-CHLORO-2-FLUORO-3-METHOXYPHENYL) PYRIDINE-2-CARBOXYLIC ACID OR A DERIVATIVE THEREOF AND CERTAIN PS II INHIBITORS



(57) Abstract: Provided herein are synergistic herbicidal compositions containing (a) a compound of formula (I): or an agriculturally acceptable salt or ester thereof and (b) a PS II inhibitor, including but not limited to, atrazine, bentazon-sodium, bromoxynil, chlorotoluron, cyanazine, diuron, hexazinone, ioxynil, isoproturon, linuron, methibenzuron, metribuzin, propanil, pyridate, siduron, simazine, simetryne, tebuthiuron and terbutylazine, or a salt or ester thereof. The compositions and methods provided herein provide control of undesirable vegetation, e.g., in direct-seeded, water-seeded and transplanted rice, cereals, wheat, barley, oats, rye, sorghum, corn or maize, sugarcane, sunflower, oilseed rape, canola, sugar beet, soybean, cotton, pineapple, pastures, grasslands, rangelands, fallowland, turf, tree and vine orchards, aquatics, plantation crops, vegetables, industrial vegetation management (IVM) or rights of way (ROW).

