

# (12) International Application Status Report

**Received at International Bureau:** 26 December 2013 (26.12.2013)

**Information valid as of:** 22 April 2014 (22.04.2014)

**Report generated on:** 21 April 2021 (21.04.2021)

**(10) Publication number:**

WO2014/093565

**(43) Publication date:**

19 June 2014 (19.06.2014)

**(26) Publication language:**

English (EN)

**(21) Application Number:**

PCT/US2013/074522

**(22) Filing Date:**

12 December 2013 (12.12.2013)

**(25) Filing language:**

English (EN)

**(31) Priority number(s):**

61/736,820 (US)

**(31) Priority date(s):**

13 December 2012 (13.12.2012)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

*C07D 213/803* (2006.01)

**(71) Applicant(s):**

DOW AGROSCIENCES LLC [US/US]; 9330 Zionsville Road Indianapolis, IN 46268 (US) *(for all designated states)*

EMONDS, Mark V. M. [US/US]; 2561 Wilder Road Midland, MI 48642-8701 (US) *(for all designated states)*

CLOUSE, Robert C. [US/US]; 4412 Autumn Ridge Circle S. Midland, MI 48642 (US) *(for all designated states)*

**(72) Inventor(s):**

EMONDS, Mark V. M.; 2561 Wilder Road Midland, MI 48642-8701 (US)

CLOUSE, Robert C.; 4412 Autumn Ridge Circle S. Midland, MI 48642 (US)

**(74) Agent(s):**

ASAM, Michael; Dow AgroSciences LLC 9330 Zionsville Rd Indianapolis, Indiana 46268 (US)

**(54) Title (EN):** IMPROVED PROCESSES FOR THE ISOLATION OF 4-AMINO-3-CHLORO-6-(4-CHLORO-2-FLUORO-3-METHOXYPHENYL)PYRIDINE-2-CARBOXYLIC ACID

**(54) Title (FR):** PROCÉDÉS AMÉLIORÉS D'ISOLEMENT D'ACIDE 4-AMINO-3-CHLORO-6-(4-CHLORO-2-FLUORO-3-MÉTHOXYPHÉNYL)PYRIDINE-2-CARBOXYLIQUE

**(57) Abstract:**

**(EN):** Processes for the preparation and isolation of 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)pyridine-2-carboxylic acid are described. These compounds are used as herbicides. The parent carboxylic acids are conveniently prepared by the alkaline hydrolysis of either the corresponding esters or the corresponding protected N-acetylated esters. The sodium salts obtained during the hydrolysis are neutralized with formic acid to provide the carboxylic acids.

**(FR):** L'invention concerne des procédés de préparation et d'isolement d'acide 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-méthoxyphényl)pyridine-2-carboxylique. Ces composés sont utilisés en tant qu'herbicides. Les acides carboxyliques parents sont préparés de manière adéquate par l'hydrolyse alcaline des esters correspondants ou d'esters N-acétylés protégés correspondants. Les sels de sodium obtenus pendant l'hydrolyse sont neutralisés à l'aide d'acide formique pour produire les acides carboxyliques.

**International search report:**

Received at International Bureau: 20 April 2014 (20.04.2014) [US]

**International Report on Patentability (IPRP) Chapter II of the PCT:**

Not available

**(81) Designated States:**

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, IR, 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, SA, 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

European Patent Office (EPO) : 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG  
African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

**Declarations:**

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate