

# (12) International Application Status Report

**Received at International Bureau:** 16 July 2013 (16.07.2013)

**Information valid as of:** 19 November 2013 (19.11.2013)

**Report generated on:** 20 April 2021 (20.04.2021)

**(10) Publication number:**

WO2013/182993

**(43) Publication date:**

12 December 2013 (12.12.2013)

**(26) Publication language:**

French (FR)

**(21) Application Number:**

PCT/IB2013/054601

**(22) Filing Date:**

04 June 2013 (04.06.2013)

**(25) Filing language:**

French (FR)

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

1255238 (FR)

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

05 June 2012 (05.06.2012)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

*C07C 257/12* (2006.01); *C07C 235/02* (2006.01); *C07C 235/06* (2006.01); *C07D 239/70* (2006.01); *C07D 239/74* (2006.01); *C07D 239/88* (2006.01); *C07D 263/56* (2006.01); *C07D 471/04* (2006.01); *C07D 473/00* (2006.01)

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

COMMISSARIAT A L'ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES [FR/FR]; 25, rue Leblanc Bâtiment « Le Ponant D » F-75015 Paris (FR) (*for all designated states*)

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

CANTAT, Thibault; 150 avenue de Verdun F-92130 Issy Les Moulineaux (FR)

GOMES, Christophe; 42 rue Prosper Legouté F-92160 Antony (FR)

JACQUET, Olivier; 10 rue Alexandre Dumas F-91400 Orsay (FR)

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

MAJIDI, Assieh; Cabinet Ores 36, rue de Saint Pétersbourg F-75008 Paris (FR)

**(54) Title (EN):** METHOD FOR PREPARING NITROGEN COMPOUNDS

**(54) Title (FR):** PROCÉDÉ DE PRÉPARATION DE COMPOSÉS AZOTÉS

**(57) Abstract:**

**(EN):** The present invention relates to a method for preparing nitrogen compounds using carbon dioxide, and to the use of said method in the production of vitamins, pharmaceutical products, adhesives, acrylic fibres, synthetic leathers, pesticides, herbicides, antifungal agents and fertilisers. The invention also relates to a method for producing vitamins, pharmaceutical products, adhesives, acrylic fibres, synthetic leathers, pesticides, herbicides, antifungal agents and fertilisers, which includes a step of preparing nitrogen compounds using the method of the invention. The invention further relates to a method for preparing labelled nitrogen compounds using carbon dioxide and to the uses thereof.

**(FR):** La présente invention concerne un procédé de préparation de composés azotés utilisant le dioxyde de carbone et l'utilisation de ce procédé dans la fabrication de vitamines, de produits pharmaceutiques, de colles, de fibres acryliques et cuirs synthétiques, de pesticides, d'herbicides, d'antifongiques, et d'engrais. Elle concerne également un procédé de fabrication de vitamines, de produits pharmaceutiques, de colles, de fibres acryliques, de cuirs synthétiques, de pesticides, d'herbicides, d'antifongiques, et d'engrais, comprenant une étape de préparation de composés azotés par le procédé selon l'invention. La présente invention concerne, en outre, un procédé de préparation de composés azotés marqués utilisant le dioxyde de carbone et leurs utilisations.

**International search report:**

Received at International Bureau: 14 October 2013 (14.10.2013) [EP]

**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, 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

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