



(51) International Patent Classification:

C07D 413/12 (2006.01) A01N 43/80 (2006.01)

(21) International Application Number:

PCT/EP2021/056623

(22) International Filing Date:

16 March 2021 (16.03.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

20164735.1	20 March 2020 (20.03.2020)	EP
20175105.4	15 May 2020 (15.05.2020)	EP

(71) Applicant: BAYER AKTIENGESELLSCHAFT
[DE/DE]; Kaiser-Wilhelm-Allee 1, 51373 Leverkusen (DE).

(72) Inventors: OLENIK, Britta; Ludgeristr. 22, 46242 Bottrop (DE). BERNHARD, Klaus; Am Buchenhang 22, 42929 Wermelskirchen (DE). LORENTZ, Lothar; Benroth 6, 51545 Waldbröl (DE). KEIL, Birgit; Sudetenstr.36, 40231 Düsseldorf (DE). RÖSLER, Bernd; Anilinstr.8, 42115 Wuppertal (DE).

(74) Agent: BIP PATENTS; Alfred-Nobel-Str. 10, 40789 Monheim am Rhein NRW (DE).

(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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, ST, 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).

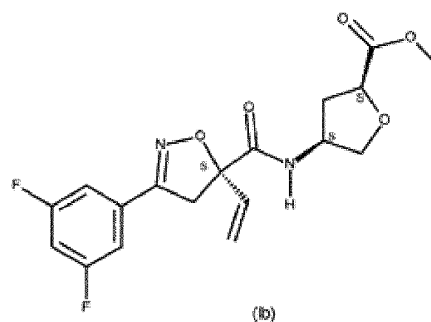
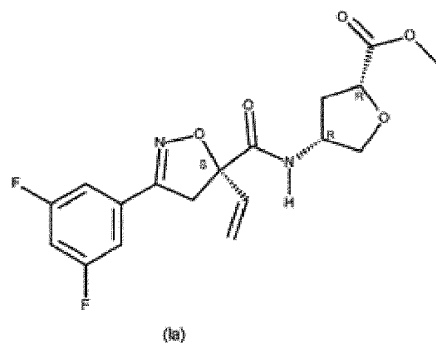
Declarations under Rule 4.17:

— 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: CRYSTAL FORMS OF METHYL(2R*,4R*)-4-[[[(5S)-3-(3,5-DIFLUOROPHENYL)-5-VINYL-4H-ISOXAZOLE-5-CARBONYL]AMINO]TETRAHYDROFURAN-2-CARBOXYLATE AND THEIR HERBICIDAL SYNERGISTIC EFFECTS



(57) Abstract: The present invention relates to the crystal forms of methyl(2R*,4R*)-4-[[[(5S)-3-(3,5-difluorophenyl)-5-vinyl-4H-isoxazole-5-carbonyl]amino]tetrahydrofuran-2-carboxylate (I) existing in the form of two stereoisomers: Methyl(2R,4R)-4-[[[(5S)-3-(3,5-difluorophenyl)-5-vinyl-4H-isoxazole-5-carbonyl]amino]tetrahydrofuran-2-carboxylate of formula (la) and methyl (2S,4S)-4-[[[(5S)-3-(3,5-difluorophenyl)-5-vinyl-4H-isoxazole-5-carbonyl]amino]tetrahydrofuran-2-carboxylate of formula (lb), to a method for preparing the crystal forms, to the use for preparing stable agrochemical formulations, and to the use in the field of agriculture for controlling harmful plants.