



(51) International Patent Classification:

C07C 319/20 (2006.01) *C07C 319/28* (2006.01)
C07C 319/26 (2006.01) *C07C 323/58* (2006.01)

(21) International Application Number:

PCT/EP2013/053795

(22) International Filing Date:

26 February 2013 (26.02.2013)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12160257.7 20 March 2012 (20.03.2012) EP

(71) Applicant (for all designated States except US): **EVONIK INDUSTRIES AG** [DE/DE]; Rellinghauser Straße 1 - 11, 45128 Essen (DE).

(72) Inventors; and

(71) Applicants (for US only): **KÖRFER, Martin** [DE/DE]; Mainstraße 20, 63796 Kahl (DE). **HASSELBACH, Hans Joachim** [DE/DE]; Deutschordenstr. 6, 63571 Gelnhausen (DE). **REICHERT, Stefan** [DE/DE]; Hedderheimer Landstraße 10, 60439 Frankfurt (DE). **JAKOB, Harald** [DE/DE]; Meerholzer Straße 1, 63594 Hasselroth (DE). **WECKBECKER, Christoph** [DE/DE]; August-Imhof-Straße 25, 63584 Gründau-Lieblos (DE). **HUTH-MACHER, Klaus** [DE/DE]; Lärchenweg 18, 63571 Gelnhausen (DE). **KRULL, Horst** [DE/DE]; Schillerstrasse 7,

63456 Hanau (DE). **DRAPAL, Bernd** [DE/DE]; Danziger Platz 1, 63755 Alzenau (DE). **PETER, Rainer** [DE/DE]; Frankenstr. 5a, 63829 Krombach (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, 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, 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, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: PROCESS FOR THE PREPARATION OF METHIONINE

(57) Abstract: The invention relates to a process for the preparation of D,L-methionine, in which carbon dioxide is fed to an aqueous potassium methioninate solution obtained by hydrolysis of 5-(2-methylmercaptoethyl)hydantoin, in order to precipitate out crude methionine, which is separated off and purified, where, for the purposes of purification, an aqueous solution of the separated-off crude methionine is prepared and subjected to a recrystallization, characterized in that the solution from which the recrystallization takes place contains potassium ions and also a crystallization additive, where the crystallization additive is a nonionic or anionic surfactant, or a mixture of different nonionic or anionic surfactants, and that the recrystallization takes place by introducing a 60 to 110°C-hot methionine solution into a 35 to 80°C-warm methionine suspension, the temperature of which is lower than that of the introduced solution, the temperature of the methionine suspension being maintained between 35 and 80°C during the addition.

