

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
12 January 2023 (12.01.2023)



(10) International Publication Number
WO 2023/280613 A1

(51) International Patent Classification:

C07F 9/30 (2006.01) C09K 21/12 (2006.01)
C08K 5/5313 (2006.01)

(21) International Application Number:

PCT/EP2022/067572

(22) International Filing Date:

27 June 2022 (27.06.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

21184297.6 07 July 2021 (07.07.2021) EP

(71) Applicant: CLARIANT INTERNATIONAL LTD
[CH/CH]; Rothausstr. 61, 4132 Muttenz (CH).

(72) Inventors: BAUER, Harald; Rauschgraben 36, 50170
Kerpen (DE). SICKEN, Martin; Mainstrasse 40 a, 51149
Köln (DE). SCHMITT, Elmar; Mühlhachenring 49, 65597
Hünfelden (DE).

(74) Agent: MIKULECKY, Klaus; Industriepark Höchst, G
860, 65926 Frankfurt (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, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH,

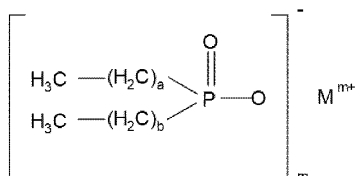
KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA,
MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI,
NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU,
RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM,
ZW.

(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).

Published:

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

(54) Title: SUSTAINABLY PRODUCED DIALKYLPHOSPHINIC SALTS



(57) Abstract: The invention provides a process for producing dialkylphosphinic salts of the formula (I), in which a and b may be the same or different and are each independently 1 to 9, and where the carbon chains may be linear, branched or cyclic, and M is Mg, Ca, Al, Sb, Sn, Ge, Ti, Fe, Zr, Zn, Ce, Bi, Sr, Mn, Li, Na, K and/or a protonated nitrogen base and m is 1 to 4, characterized in that the process comprises: feeding a substream of renewable raw materials and/or recycled raw materials into a main stream of conventional raw materials originated from petroleum; converting said renewable raw material and/or recycled raw materials to ethylene together with said conventional raw materials; reacting the resultant ethylene stream with derivatives of hypophosphorous acid to give a derivative of the dialkylphosphinic acid; and reacting said derivative of the dialkylphosphinic acid with a metal salt to give dialkylphosphinic salts of the formula (I), wherein the renewable raw materials are tall oil, tung oil, wood tar, creosote, or vegetable oils such as palm oil, soya oil, rapeseed oil, sunflower oil, palm kernel oil, cottonseed oil, peanut oil, maize kernel oil, coconut oil, olive oil, sesame oil, linseed oil and/or safflower oil, wherein said recycled raw materials are selected from food wastes, residues or wastes from food production, papermaking or pulp processing, and any other materials of recycled origin, and the ratio of said mainstream of conventional raw material to said substream of renewable raw materials and/or recycled raw materials is $10^9:1$ to $1:10^6$.



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