

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
28 April 2022 (28.04.2022)



(10) International Publication Number
WO 2022/084049 A1

(51) International Patent Classification:
C07C 29/48 (2006.01) B01J 3/00 (2006.01)
C07C 31/20 (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:
PCT/EP2021/077662

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

(22) International Filing Date:
07 October 2021 (07.10.2021)

Published:

— with international search report (Art. 21(3))
— with amended claims (Art. 19(1))

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
20203029.2 21 October 2020 (21.10.2020) EP

(71) Applicant: **EVONIK OPERATIONS GMBH** [DE/DE];
Rellinghauser Strasse 1-11, 45128 Essen (DE).

(72) Inventors: **WIEDERHOLD, Holger**; Stockhausenweg
49, 64297 Darmstadt (DE). **BOLZ, David**; Stegstraße 81,
60594 Frankfurt (DE). **GLATZ, Patrik**; Tannenweg 4,
63579 Freigericht (DE).

(74) Agent: **EVONIK PATENT ASSOCIATION**; c/o Evonik
Industries AG, IP Management, Bau 1042A, PB15, Paul-
Baumann-Strasse 1, 45772 Marl (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,

(54) Title: A METHOD FOR THE PREPARATION OF 1,2-PROPANEDIOL

(57) Abstract: 1,2-propanediol is prepared by a method comprising step a) of reacting propene with hydrogen peroxide at 50 to 110 °C in the presence of a catalyst mixture comprising a phase transfer catalyst and a polytungstophosphate in a liquid reaction mixture comprising an aqueous phase with a maximum apparent pH of 6 and an organic phase; step b) of separating the reaction mixture into an aqueous phase (Pa) comprising 1,2-propanediol and an organic phase (Po); step c) of recycling at least part of the separated organic phase (Po) to step a); step d) of recovering 1,2-propanediol from the aqueous phase (Pa); and step e) of reacting a tungstate with hydrogen peroxide and phosphoric acid at 5 to 40 °C in the presence of the phase transfer catalyst in a liquid mixture comprising an aqueous and an organic phase, followed by passing at least a part of the resulting organic phase comprising the polytungstophosphate and phase transfer catalyst to reaction step a).



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