



(51) International Patent Classification:

C07C 67/37 (2006.01) **B01J 37/00** (2006.01)
B01J 29/06 (2006.01) **B01J 35/10** (2006.01)
B01J 29/18 (2006.01) **B01J 29/87** (2006.01)
B01J 29/24 (2006.01) **C01B 39/50** (2006.01)
B01J 29/65 (2006.01) **C01B 39/26** (2006.01)
B01J 29/70 (2006.01)

(21) International Application Number:

PCT/EP2014/054393

(22) International Filing Date:

6 March 2014 (06.03.2014)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13158470.8 8 March 2013 (08.03.2013) EP

(71) Applicant: **BP CHEMICALS LIMITED** [GB/GB];
Chertsey Road, Sunbury-on-Thames Middlesex TW16 7BP
(GB).

(72) Inventor; and

(71) Applicant (*for US only*): **SUNLEY, John Glenn**
[GB/GB]; Saltend, Hull East Yorkshire HU12 8DS (GB).

(74) Agents: **BROOKE, Caron** et al.; BP International Limited,
Global Patents & Technology Law, Chertsey Road,
Sunbury on Thames Middlesex TW16 7LN (GB).

(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, IR, 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, SA,
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,
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))*
- *of inventorship (Rule 4.17(iv))*

Published:

- *with international search report (Art. 21(3))*

(54) Title: CARBONYLATION CATALYST AND PROCESS

(57) Abstract: A catalyst and process for the production of methyl acetate by contacting dimethyl ether and carbon monoxide in the presence of a catalyst which is a zeolite of micropore volume of 0.01 ml/g or less.



WO 2014/135661 A1