

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
30 May 2025 (30.05.2025)



(10) International Publication Number
WO 2025/108860 A1

(51) International Patent Classification:

C01B 33/14 (2006.01) C01B 33/149 (2006.01)
C01B 33/146 (2006.01)

(21) International Application Number:

PCT/EP2024/082635

(22) International Filing Date:

18 November 2024 (18.11.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

23307002.8 20 November 2023 (20.11.2023) EP

(71) Applicant: **MERCK PATENT GMBH** [DE/DE]; Frank-
furter Strasse 250, 64293 Darmstadt (DE).

(72) Inventors: **JACQUINOT, Eric**; c/o Merck Performance
Materials S.A.S., 1 Rue du flottage, 60350 TROSLY
BREUIL (FR). **HANUS, Leo**; c/o EMD Performance Ma-
terials Corp., 251 Little Falls Drive, Wilmington, Delaware
19808 (US).

(74) Agent: **MERCK PATENT ASSOCIATION**; c/o Merck
Patent GmbH, 64271 Darmstadt (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, CV, 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, MG, MK, MN, MU, 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, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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: SILICA PARTICLES, COMPOSITIONS COMPRISING SUCH PARTICLES, AND USES OF SUCH PARTICLES AND
COMPOSITIONS

(57) Abstract: The present application relates to surface-modified silica particles comprising a nitrogen- or phosphorus-containing group or compound, and to compositions comprising such particles as well as to uses of such surface-modified silica particles and compositions comprising such silica particles.



WO 2025/108860 A1