



(51) International Patent Classification:

C11B 3/10 (2006.01) *B01J 20/10* (2006.01)
C11B 3/00 (2006.01)

(21) International Application Number:

PCT/MY2022/050126

(22) International Filing Date:

02 December 2022 (02.12.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant: **VULCAN PHOTONICS SDN. BHD.**

[MY/MY]; D-11-08, Menara Suezcap 1 KL Gateway, No. 2,
Jalan Kerinchi, Kampung Kerinchi, Kuala Lumpur, 59200
(MY).

(72) Inventors: **KOO, Khong Nee**; No. 32 Lengkok Paya

Terubong, Ayer Itam, Pulau Pinang, 11060 (MY). **SEAH,
Mei Qun**; 66 Jalan USJ 12/2F, Subang Jaya, Selangor,
47630 (MY). **JAMALUDIN, Farah Hidayah Binti**; No
70, Jalan Pulai Perdana 2/3, Taman Pulai Perdana, Johor
Bahru, Johor, 81110 (MY).

(74) Agent: **HEMINGWAY, Christopher Paul** et al.; Marks

& Clerk (Malaysia) Sdn Bhd, Unit 6, Level 20, Tower A,

Menara UOA Bangsar, 5 Jalan Bangsar Utama 1, Taman
Bangsar, Kuala Lumpur, 59000 (MY).

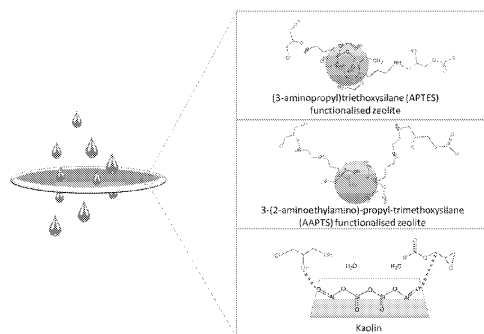
(81) Designated States (unless otherwise indicated, for every

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, 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).

(54) Title: SYSTEM AND PROCESS FOR REMOVAL OF TOXIC CHEMICALS FROM VEGETABLE OILS



Legend:

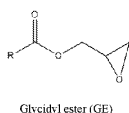
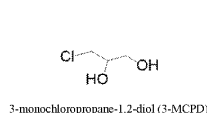


FIG. 1

(57) Abstract: A system for removing toxic chemicals from a re-
fined, bleached and deodorized oil (RBDPO) comprising: a treat-
ment section comprising an adsorbent for removal of the toxic
chemicals from the RBDPO; a regeneration section for separat-
ing the treated RBDPO from the adsorbent hence regenerating
the adsorbent; wherein the adsorbent includes a material 10 that
is functionalized with a silane coupling agent such that when the
toxic chemicals from the RBDPO are in contact with the func-
tionalized adsorbent, a chemical bonding is formed between the
toxic chemicals and adsorbent therefore enabling the separation
of the toxic chemicals from the RBDPO and subsequently remo-
val of the toxic chemicals from the RBDPO. A process is also
disclosed herein.

[Continued on next page]

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— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*
— *in black and white; the international application as filed
contained color or greyscale and is available for download
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