## CORRECTED VERSION

## (19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 3 April 2008 (03.04.2008)

(10) International Publication Number WO 2008/038300 A8

(51) International Patent Classification:

C07B 57/00 (2006.01) **B01,J 20/32** (2006.01) B01J 20/29 (2006.01) B01J 20/286 (2006.01)

(21) International Application Number:

PCT/IN2007/000376

(22) International Filing Date: 30 August 2007 (30.08.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2160/DEL/2006 29 September 2006 (29.09.2006)

- (71) Applicant (for all designated States except US): COUN-CIL OF SCIENTIFIC & INDUSTRIAL RESEARCH [IN/IN]; Anusandhan Bhawan, Rafi Marg, New Delhi 110 001 (IN).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): ABDI, Syed, Hasan, Razi [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN). KURESHY, Rukhsana, Ilyas [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN). KHAN, Noor-ul, Hasan [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN). JASRA, Raksh, Vir [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN). MAYANI, Vishal, Jitendrabhai [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN). AGARWAL, Santosh [IN/IN]; Central Salt & Marine Chemicals Research Institute, Gijubhai Badheka Marg, Bhavnagar 364 002, Gujarat (IN).

- (74) Agent: DHAWAN, Ramesh, Chander; Patent Agent, Lall Lahiri & Salhotra, Plot No. B-28, Sector-32, Institutional Area, Gurgaon 122 001, Haryana (IN).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, IS, JP, KE, KG, KM, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Declaration under Rule 4.17:**

of inventorship (Rule 4.17(iv))

## Published:

with international search report

(48) Date of publication of this corrected version:

7 May 2009

(15) Information about Correction: see Notice of 7 May 2009

(54) Title: ORGANIC-INORGANIC HYBRID CHIRAL SORBENT AND PROCESS FOR THE PREPARATION THEREOF

(57) Abstract: The present invention provides an organic-inorganic hybrid chiral sorbent for chiral resolution of various racemic compounds viz. racemic mandelic acid, 2- phenyl propionic acid, diethyl tartrate, 2,2'-dihydroxy-1,1 '-binaphthalene (BINOL) and cyano chromene oxide with excellent chiral separation (enantiomeric excess, 99 %) in case of mandelic acid under medium pressure column chromatography. These optically pure enantiomers find applications as intermediates in pharmaceutical industries.

