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

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
30 May 2002 (30.05.2002)

PCT

(10) International Publication Number
WO 02/42291 A1

(51) International Patent Classification[7]: C07D 401/06, A61K 31/4545, A61P 3/00, 9/10

(21) International Application Number: PCT/EP01/12326

(22) International Filing Date: 25 October 2001 (25.10.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0015143 23 November 2000 (23.11.2000) FR

(71) Applicant *(for all designated States except US)*: **MERCK PATENT GMBH** [DE/DE]; Frankfurter Strasse 250, 64293 Darmstadt (DE).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **GUEVEL, Alyx-Caroline** [FR/FR]; 166, avenue des Frères Lumière, F-69008 Lyon (FR). **FESTAL, Didier** [FR/FR]; Les Baronnies, 2, rue Pierre Baronnier, F-69130 Ecully (FR). **COLLONGES, François** [FR/FR]; 135, impasse du Grand Champ, F-01700 Beynost (FR). **GUERRIER, Daniel** [FR/FR]; 35C, Route de Charly, F-69230 Saint Genis Laval (FR). **CHEVREUIL, Olivier** [FR/FR]; Le Petit Maillard, F-01400 Condeissiat (FR).

(74) Common Representative: **MERCK PATENT GMBH**; Frankfurter Strasse 250, 64293 Darmstadt (DE).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

162162

WO 02/42291 A1

(54) Title: 4-(BIPHENYLCARBONYLAMINO)PIPERIDINE DERIVATIVES AS MTP INHIBITORS

(57) Abstract: The present invention relates to compounds of the formula (I): in which: Z represents biphenyl optionally substitute in position 2', 3', 4', 5' and 6' with one or more substitutents chosen from trihalomethyl and trihalomethoxy; Het represents quinolyl, quinoxalyl or pyridyl optionally substituted with one or more substitutents chosen from halo, cyano, nitro, (C_1-C_6)alkyl, (C_6-C_{12})aryl, (C_1-C_6)alkoxy, hydroxyl, (C_1-C_6)thioalkoxy, carboxyl and (C_1-C_6)alkoxycarbonyl, or pharmaceutically acceptable salts thereof. These compounds are useful as inhibitors of microsomal triglyceride transfer protein and as inhibitors of the secretion of B apoproteins.