

(51) International patent classification⁷: C07D 471/04, A61K 31/4709, A61P 31/04 // (C07D 471/04, 221:00, 209:00)	A1	(11) International publication number: WO 00/31076 (43) International publication date: 2 June 2000 (02.06.00)
(21) International application number: PCT/EP99/08776 (22) International filing date: 15 November 1999 (15.11.99) (30) Data relating to the priority: 198 54 355.7 25 November 1998 (25.11.98) DE (71) Applicant (for all designated States except US): BAYER AKTIENGESELLSCHAFT [DE/DE]; D-51368 Leverkusen (DE). (72) Inventors; and (75) Inventors/Applicants (US only): HIMMLER, Thomas [DE/DE]; Schöne Aussicht 1 b, D-51519 Odenthal (DE). HALLENBACH, Werner [DE/DE]; Lichtenberger Strasse 68, D-40789 Monheim (DE). RAST, Hubert [DE/DE]; Auf dem Bruch 77 a, D-51381 Leverkusen (DE). (74) Joint Representative: BAYER AKTIENGESELLSCHAFT; D-51368 Leverkusen (DE).		(81) Designated states: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO Patent (GH, GM, KE, LS, MW, 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), OAPI Patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With the International Search Report. Before expiry of the period provided for amending the claims, will be republished if such amendments are received.

As printed

(54) Title: CRYSTAL MODIFICATION B OF 8-CYANO-1- CYCLOPROPYL -7-(1S,6S-2, 8-DIAZABICYCLO [4.3.0]NONAN -8-YL)-6- FLUORO-1,4- DIHYDRO-4- OXO-3-QUINOLINE CARBOXYLIC ACID

(54) Bezeichnung: KRISTALLMODIFIKATION B VON 8-CYAN- 1-CYCLOPROPYL -7-(1S,6S-2, 8-DIAZABICYCLO -[4.3.0]NONAN -8-YL)-6- FLUOR-1, 4-DIHYDRO- 4-OXO-3- CHINOLINCARBONSAURE

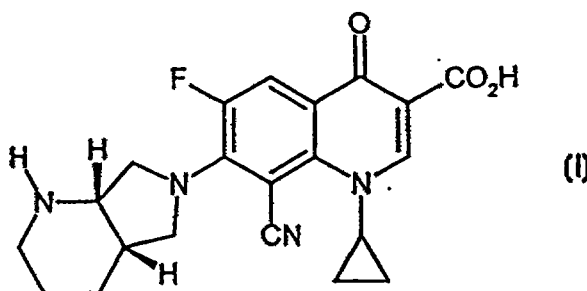
(57) Abstract

The invention relates to a defined crystal modification of 8-cyano-1- cyclopropyl -7-(1S,6S-2, 8-diazabicyclo [4.3.0]nonan -8-yl)-6- fluoro-1, 4-dihydro-4- oxo-3-quinoline carboxylic acid of formula (I), to methods for producing the same, and to its use in pharmaceutical preparations. The crystal modification can be distinguished from other crystal modifications of

8-cyano-1- cyclopropyl-7- (1S,6S-2,8- diazabicyclo [4.3.0]nonan -8-yl)-6- fluoro-1, 4-dihydro-4- oxo-3-quinoline carboxylic acid of formula (I) by its characteristic X-ray powder diffractogram and its differential thermal diagram (see description).

(57) Zusammenfassung

Die vorliegende Erfindung betrifft eine definierte Kristallmodifikation von 8-Cyan-1- cyclopropyl- 7-(1S,6S-2, 8-diazabicyclo [4.3.0]nonan-8- yl)-6-fluor-1, 4-dihydro-4- oxo-3- chinolincarbonsäure der Formel (I), Verfahren zu ihrer Herstellung sowie ihre Verwendung in pharmazeutischen Zubereitungen. Die Kristallmodifikation ist von anderen Kristallmodifikationen von 8-Cyan-1- cyclopropyl-7- (1S,6S-2,8- diazabicyclo [4.3.0]nonan -8-yl)-6- fluoro-1, 4-dihydro-4- oxo-3- chinolincarbonsäure der Formel (I) durch ihr charakteristisches Röntgen-Pulverdiffraktogramm und ihr Differentialthermodiagramm unterscheidbar (siehe Beschreibung).



(I)