

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
29 June 2006 (29.06.2006)

PCT

(10) International Publication Number
WO 2006/067395 A1

(51) International Patent Classification:

C07C 209/16 (2006.01) C07C 29/143 (2006.01)
C07C 211/29 (2006.01) C07C 33/20 (2006.01)(74) Agent: ATKINSON, Jonathan, D., M.; Urquhart-Dykes
& Lord LLP, Tower North Central, Merrion Way, Leeds
LS2 8PA (GB).

(21) International Application Number:

PCT/GB2005/004882

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI,
NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date:

14 December 2005 (14.12.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0428128.3 22 December 2004 (22.12.2004) GB

(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, 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).(71) Applicant (for all designated States except US): AVECIA
PHARMACEUTICALS LIMITED [GB/GB]; Hexagon
House, Blackley, Manchester M9 8ZS (GB).

(72) Inventors; and

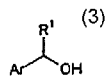
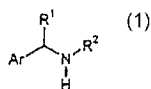
(75) Inventors/Applicants (for US only): HODGES, George,
Robert [GB/GB]; 12 Grange Close, Oakley, Bedfordshire
MK43 7TE (GB). MARTIN, Juliette [FR/FR]; 2 Rési-
dence Montesquieu, F-49000 Angers (FR). HAMMIL,
Noel, Anthony [GB/GB]; P.O. Box 521, Leeds Road, Hud-
dersfield, West Yorkshire (GB). HOUSON, Ian, Nicholas
[GB/GB]; P.O. Box 521, Leeds Road, Huddersfield, West
Yorkshire (GB).

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 "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PROCESS



(57) Abstract: A process for the preparation of a compound of Formula (1) wherein Ar represents an optionally substituted hydrocarbyl or an optionally substituted heterocyclyl group comprising an aromatic moiety; and R¹ and R² each independently represent an optionally substituted hydrocarbyl or an optionally substituted heterocyclyl group; said process comprising: a) reducing a compound of Formula (2) to form a compound of Formula (3); b) activating the compound of Formula (3) to form a compound of Formula (4); wherein OX represents a leaving group; and c) coupling the compound of Formula (4) to a compound of Formula (5): to form a compound of Formula (1). A stereoselective reduction of ketones to alcohols is also disclosed.