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(54) Title: SYNTHESIS OF EZETIMIBE

(57) Abstract: The present disclosure relates to processes for the preparation of Ezetimibe (1-(4-fluorophenyl)-3(R)-[3-(4-fluorophenyl)-3(S)-hydroxypropyl]-4(S)-(4-hydroxyphenyl)-2-azetidinone) and related azetidine compounds.



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A. CLASSIFICATION OF SUBJECT MATTER*C07D 205/08(2006.01)i, A61K 31/397(2006.01)i, A61P 9/10(2006.01)i*

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C07D 205/08; A61K 31/397; A61P 9/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal), NCBI (PubMed, MeSH)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2000-34240 A1 (SCHERING CORPORATION) 15 June 2000 See formula (VI), (VII), (VIII); examples; pp. 2-4, 9-10, 12; abstract	1-50
X	US 6207822 B1 (THIRUVENGADAM TIRUVETTIPURAM K. et al.) 27 March 2001 See formula VI, VII, VIII; columns 2, 4-5, 10-11; claims; abstract	1-50
X	US 2006-0135755 A1 (THIRUVENGADAM TIRUVETTIPURAM K. et al) 22 June 2006 See formula IX, XI, XII; examples; pp. 11-14; claims	1-50
X	DUANE A. BURNETT, et al., 'Synthesis of iodinated biochemical tools related to the 2-azetidinone class of cholesterol absorption inhibitors', Bioorganic & Medicinal Chemistry Letters, 2002, Vol. 2, No. 3, pp. 311-314, ISSN: 0968-894X See scheme 2; p. 312	1-50
A	WO 2007-017705 A1 (GLENMARK PHARMACEUTICALS LIMITED et al.) 15 February 2007 See compound 7, 8; pp. 2-3, 7-8; claims	1-50



Further documents are listed in the continuation of Box C.



See patent family annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US 6207822 B1	27.03.2001	None	
US 2006-0135755 A1	22.06.2006	None	
WO 2007-017705 A1	15.02.2007	None	