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Shevo 503/38, Gilo, 93845 Jerusalem (IL). **DILLER, Dov** [IL/IL]; Rehov Chida 20, Bayit Vegan, 96464 Jerusalem (IL). **GROSS, Irwin** [IL/IL]; Idelson 16/24, Ramot gimmel 97665 (IL).

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(74) Agent: **BRAINARD, Charles, R.**; Kenyon & Kenyon, One Broadway, New York, NY 10004 (US).

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(71) Applicant (*for all designated States except BB, US*): **TEVA PHARMACEUTICAL INDUSTRIES LTD.** [IL/IL]; 5 Basel Street, P.O. Box 3190, 49131 Petah Tiqva (IL).

(71) Applicant (*for BB only*): **TEVA PHARMACEUTICALS USA, INC.** [US/US]; 1090 Horsham Road, P.O. Box 1090, North Wales, PA 19454-1090 (US).

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(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **DOLITZKY, Ben-Zion** [IL/IL]; Lohame HaGhetto 32, Petach Tiqva 49651 (IL). **WIZEL, Shlomit** [IL/IL]; Yehuda Hanassi 2, Petach Tiqva 49742 (IL). **KROCHMAL, Barnaba** [IL/IL];

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(54) Title: POLYMORPHS OF FEXOFENADINE HYDROCHLORIDE

(57) Abstract: The present invention provides novel crystal forms of fexofenadine hydrochloride Forms (V, VI and VIII through XV) and processes for their preparation and preparation of amorphous form and other crystalline forms of fexofenadine hydrochloride. Forms (XIV and XV) are solvates of ethyl acetate, while Form IX is anhydrous, but can be crystallized as solvate of MTBE or cyclohexane. The forms are useful for administration to humans and animals to alleviate symptoms caused by histamine. The present invention further provides pharmaceutical compositions of the new crystalline forms.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) :IPC-7 A61K31/445, C07D 211/22, 211/34

US CL :514/317, 546/239, 240

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)

U.S. : 514/317, 546/239, 240

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)

CAS--structure

EAST/WEST--subclass

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X ----- P, Y	WO 00/71124 A1 (RANBAXY LABORATORIES LID.) 30 November 2000, seep.5-7, examples 1-5.	6-8, 9-10 ----- 1-5, 11-43, 50-93, 113-120
Y	US 5,654,433 A (KING et al.) 05 August 1997, see entire article especially column 19, lines 5-35.	1-43, 50-93, 113-120
Y	WO 93/21156 A1 (DOW PHARMACEUTICALS INC.) 28 October 1993, see entire article especially p.34 lines 24-25, p.34-35 step (e).	1-43, 50-93, 113-120

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
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Commissioner of Patents and Trademarks
Box PCT
Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

CELIA CHANG

Telephone No. (703) 308-1285

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 95/31437 A1 (MARION MERREL DOW INC.) 23 November 1995, see entire article especially p. 19-34.	1-120
A	us 5,925,761 A (SENANAYAKE et al.) 20 July 1999, see entire article.	1-120