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(54) **COMPOUND HAVING IMMUNE DISEASE TREATMENT EFFECT AND USE THEREOF**

VERBINDUNG MIT IMMUNERKRANKUNGBEHANDLUNGSWIRKUNG UND VERWENDUNG
DAVON

COMPOSÉ AYANT UN EFFET THÉRAPEUTIQUE SUR LES MALADIES IMMUNITAIRES ET
UTILISATION DE CE COMPOSÉ

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EP 3 130 582 B8

(56) References cited:

- | | |
|---------------------|---------------------|
| WO-A2-03/084475 | WO-A2-03/089601 |
| KR-A- 20110 053 837 | KR-A- 20110 081 095 |
| KR-A- 20140 036 598 | US-A- 4 060 635 |
| US-A- 4 183 956 | US-A1- 2011 053 941 |
| US-A1- 2013 095 140 | |
- H. C. CARRINGTON ET AL: "Synthetic antimalarials. Part XLIX. The structure and synthesis of the dihydrotriazine metabolite of proguanil", JOURNAL OF THE CHEMICAL SOCIETY (RESUMED), 1 January 1954 (1954-01-01), pages 1017-1031, XP055061878, ISSN: 0368-1769, DOI: 10.1039/jr9540001017
 - SHAPIRO S L ET AL: "HYPOGLYCEMIC AGENTS. II. ARYLBIGUANIDES", JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, vol. 81, 20 July 1959 (1959-07-20), pages 3725-3728, XP001160743, AMERICAN CHEMICAL SOCIETY, US ISSN: 0002-7863, DOI: 10.1021/JA01523A059
 - DATABASE PubChem Compound [Online] 20 October 2014 (2014-10-20), XP055390088, Database accession no. AKOS021352901
 - DATABASE PubChem Compound [Online] 20 October 2014 (2014-10-20), XP055390098, Database accession no. AKOS021352899
 - DATABASE PubChem Compound [Online] 30 November 2012 (2012-11-30), XP055390103, Database accession no. CID 68132850
 - RICHARD A. GLENNON ET AL: "Arylguanidine and arylbiguanide binding at 5-HT₃ serotonin receptors: A QSAR study", BIOORGANIC & MEDICINAL CHEMISTRY, vol. 11, no. 20, 1 October 2003 (2003-10-01), pages 4449-4454, XP055390154, GB ISSN: 0968-0896, DOI: 10.1016/S0968-0896(03)00488-7
 - CURD F H S ET AL: "SYNTHETIC ANTIMALARIALS. PART IV. 2-PHENYLGUANIDINO-4-AMINOALKYLAMINO-6-METH YLPYRIMIDINES", JOURNAL OF THE CHEMICAL SOC, 1 January 1946 (1946-01-01), pages 362-366, XP009022670, CHEMICAL SOCIETY, LETCHWORTH; GB ISSN: 0368-1769, DOI: 10.1039/JR9460000362
 - DATABASE REGISTRY [Online] CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; 25 February 2014 (2014-02-25), XP002772055, Database accession no. 1555308-85-4