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(54) Title: SYSTEMS AND METHODS FOR THE DELIVERY OF CORTICOSTEROIDS

(57) Abstract: The present invention relates to methods and systems for the delivery of a corticosteroid comprising (1) an inhalable aqueous mixture comprising a corticosteroid and a solubility enhancer and (2) an inhalable nebulizer, wherein the delivery of the aqueous mixture comprising the corticosteroid by the nebulizer results in an enhanced pharmacokinetic profile of the corticosteroid as compared to conventional inhalable therapies and/or increase lung deposition.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/48927

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A01N 45/00 (2008.04); A61K 31/56 (2008.04)

USPC - 514/169

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)

USPC - 514/169

IPC(8)- A01N 45/00 (2008.04); A61K 31/56 (2008.04)

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)

PubWest, USPTO, Google Scholar, Google Patent, Public Pair : corticosteroid, aqueous, solub\$6, solubility, enhanc\$4, solubility enhancer, nebulizer, solvent, adminstrat\$5, concentration, increaes, rise, inhaler, treatment, lung, asthma, brocheoconstriction

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,192,528 A (RADHAKRISHMAN et al.) 9 Mar 1993 (09.03.1993); col 3, ln 24-40; col 3, ln 24-40; col 3, ln 2-40; col 3, ln 42-43; col 6, ln 9-19; col 8, ln 46-59; col 8, ln 12-35; col 2, ln 59- col 3, ln 3; col 7, ln 38-50; col 7, ln 50-65	1-4, 8, 10-13, 17, 21-23, 27, 31-33, 37, 41-44, 46, 51-56, 60, 62-66, 69, 73-75, 79, 83-85, 89, 93-96, 99, 103-104 5-7, 9, 14-16, 18-20, 24-26, 28-30, 34-36, 38-40, 45, 47-50, 57-59, 61, 67, 68, 70-72, 76-78, 80-82, 86-88, 90-92, 97-98, 100-102
Y	US 2004/0228805 A1 (PIIEPER et al.) 18 Nov. 2004 (18.11.2004); para [0070]	5, 18, 28, 38, 48, 57, 70, 80, 90, 100
Y	US 5,874,418 A (STELLA et al.) 23 Feb 1999 (23.02.1999); col 6, ln 60-67	6-7, 19, 20, 29, 30, 39, 40, 49, 50, 58, 59, 71, 72, 81, 82, 91, 92, 101, 102 9, 61
Y	US 2005/0065141 A1 (ODINK et al.) 24 Mar 2005 (24.03.2005); para [0086]	14-16, 24-26, 34-36, 45, 47, 67, 68, 76, 77, 78, 86, 87, 88, 97, 98
Y	European Respiratory Journal 17:14-19 (2001) ?Ultrasonic versus jet nebulization of iloprost in several pulmonary ypertension? (GESSLER et al.) pg 1, para 2	



Further documents are listed in the continuation of Box C.



* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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