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(12) United States Patent

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(54) TREATMENT OF ALLERGIC RHINITIS USING A COMBINATION OF MOMETASONE AND OLOPATADINE

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See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

| 4,871,865 A | A 10/1989 | Lever et al. |
|----------------|-------------------|-------------------|
| 4,923,892 A | A 5/1990 | Lever et al. |
| 5,062,549 A | A 11/1991 | Smith et al. |
| 5,837,699 A | A 11/1998 | Sequeira et al. |
| 6,127,353 A | A 10/2000 | Yuen et al. |
| 6,841,146 I | 32 1/2005 | Haslwanter et al. |
| 7,811,606 H | 32 10/2010 | Chaudry |
| 7,977,376 H | 32 7/2011 | Singh et al. |
| 8,399,508 H | 3/2013 | Singh et al. |
| 9,078,923 H | 32 7/2015 | Dhuppad et al. |
| 2004/0097474 A | A 1 5/2004 | Cagle et al. |
| 2005/0158247 A | A 1 7/2005 | Veronesi et al. |
| | (Continued) | |

FOREIGN PATENT DOCUMENTS

EP 2014305 A1 1/2009 KR 101304341 B1 9/2013 (Continued)

OTHER PUBLICATIONS

Kaiser (Clinical Review, Olopatadine HCI Nasal Spray, 2008). (Year: 2008).*

(Continued)

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(57) ABSTRACT

The present invention relates to a method of treating allergic rhinitis in a subject (e.g., a pediatric human subject) in need thereof comprising nasally administering to the subject an effective amount of a fixed-dose pharmaceutical composition comprising mometasone or its salt and olopatadine or its salt

18 Claims, 3 Drawing Sheets