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(54) **COSMETIC AEROSOL SPRAY**

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2007/0190004	A1*	8/2007	Bockmuhl	A61K 8/33 424/65
2011/0250160	A1	10/2011	Banowski et al.	
2013/0280175	A1	10/2013	Banowski et al.	

FOREIGN PATENT DOCUMENTS

DE	102005024595	A1	11/2006
DE	102006062499	A1	7/2008
WO	2012/084972	A1	6/2012

OTHER PUBLICATIONS

Emulsifiers with HLB values [retrieved on Dec. 4, 2014 from on-line website http://www.theherbarie.com/files/resource-center/formulating/Emulsifiers_HLB_Values.pdf].*

An English translation of DE 102005024595A1 (machine translated by Ecepacenet) [retrieved on Dec. 4, 2014 from http://translationportal.epo.org/emtp/translate/?ACTION=description-retrieval&COUNTRY=DE&ENGINE=google&FORMAT=docdb&KIND=A1&LOCALE=en_EP&NUMBER=102005024595&OPS=ops.epo.org/3.1&SRCLANG=de&TRGLANG=en].*

PCT International Search Report (PCT/EP2011/065043) dated Aug. 5, 2014.

* cited by examiner

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(57) **ABSTRACT**

A cosmetic product includes a water-in-oil emulsion containing: a) at least one cosmetic active ingredient, b) at least one water-in-oil emulsifier, c) at least one non-ionic polyalkylene glycol ether having a HLB value >7, d) at least one C_8-C_{16} isoparaffin, and also including at least one propellant and an aerosol dispensing device. The emulsion has a high stability, a reduced susceptibility to corrosion, a good cosmetic effect and reduced formation of deposits during the application thereof.

9 Claims, No Drawings