

Title (en)

COSMETIC APPLICATOR HEAD WITH DYNAMICALLY ADJUSTABLE DUROMETER

Title (de)

KOSMETISCHER APPLIKATOR MIT DYNAMISCH EINSTELLBAREM HÄRTEMESSER

Title (fr)

TÊTE D'APPLICATEUR DE PRODUIT COSMÉTIQUE DOTÉE D'UN DUROMÈTRE AJUSTABLE DE FAÇON DYNAMIQUE

Publication

EP 2713808 A4 20150624 (EN)

Application

EP 12793976 A 20120530

Priority

- US 201113151387 A 20110602
- US 2012039957 W 20120530

Abstract (en)

[origin: WO2012166777A2] A cosmetic applicator includes bristles or tines with selectively changeable durometer to allow the relative flexibility or stiffness to be adjusted by the user. The bristles or tines are made directly from or incorporate within their structure piezoelectric ceramic fibers. The relative flexibility or stiffness of the piezoelectric fibers can be adjusted by subjecting the fibers to an electric current, or an electric or magnetic field, to cause the fibers to gain or lose flexibility. Stiffness or softness of the applicator can thus be adjusted to be suitable for different application operations such as depositing cosmetic product or combing and clump removal.

IPC 8 full level

A45D 34/04 (2006.01); **A45D 40/26** (2006.01); **A46B 13/02** (2006.01)

CPC (source: EP KR US)

A45D 34/04 (2013.01 - KR); **A45D 40/26** (2013.01 - KR); **A45D 40/265** (2013.01 - EP US); **A46B 13/02** (2013.01 - KR); **A46B 15/00** (2013.01 - KR); **A46B 15/0016** (2013.01 - EP US); **A46D 1/0207** (2013.01 - EP US); **A45D 2034/007** (2013.01 - EP US); **A45D 2200/20** (2013.01 - EP US); **A46B 3/18** (2013.01 - EP US); **A46B 2200/1053** (2013.01 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2012166777A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012166777 A2 20121206; **WO 2012166777 A3 20130516**; AU 2012262304 A1 20140116; CA 2837869 A1 20121206; CN 103648326 A 20140319; EP 2713808 A2 20140409; EP 2713808 A4 20150624; JP 2014522279 A 20140904; KR 20140028080 A 20140307; US 2012305022 A1 20121206

DOCDB simple family (application)

US 2012039957 W 20120530; AU 2012262304 A 20120530; CA 2837869 A 20120530; CN 201280030371 A 20120530; EP 12793976 A 20120530; JP 2014513657 A 20120530; KR 20137034739 A 20120530; US 201113151387 A 20110602