

Title (en)

FILTER INCLUDING RANDOMLY-ORIENTED FIBERS FOR REDUCTION OF PARTICLE BREAKTHROUGH

Title (de)

FILTER MIT REGELLOS ANGEORDNETEN FASERN ZUR VERMINDERUNG VON TEILCHENDURCHBRUCH

Title (fr)

FILTRE COMPORTANT DES FIBRES ORIENTÉES DE FAÇON ALÉATOIRE POUR DIMINUER LE PASSAGE DES PARTICULES

Publication

EP 2234509 B1 20120704 (EN)

Application

EP 08864391 A 20081222

Priority

- EP 2008011108 W 20081222
- US 830507 P 20071220

Abstract (en)

[origin: WO2009080368A1] Provided is a cigarette filter (10) and method of making the filter. The filter (10) includes an adsorbent (12) dispersed within the filter (10) and a downstream plug (16) of randomly-oriented fibers (14). The randomly-oriented fibers (14) mechanically capture adsorbent particles entrained in tobacco smoke. One or more plugs (25) of axially-oriented fibers (30) may also be located upstream or downstream or both of the adsorbent (12), and are included in an amount sufficient to adjust the length of the filter (10).

IPC 8 full level

A24D 3/02 (2006.01); **A24D 3/04** (2006.01)

CPC (source: EP KR US)

A24D 3/0225 (2013.01 - KR); **A24D 3/0287** (2013.01 - EP KR US); **A24D 3/04** (2013.01 - EP US); **A24D 3/048** (2013.01 - EP US); **A24D 3/063** (2013.01 - KR); **A24D 3/10** (2013.01 - KR); **A24D 3/163** (2013.01 - KR)

Designated contracting state (EPC)

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

Designated extension state (EPC)

RS

DOCDB simple family (publication)

WO 2009080368 A1 20090702; AU 2008340634 A1 20090702; AU 2008340634 B2 20130516; BR PI0821407 A2 20150616; BR PI0821407 B1 20190312; CN 101873810 A 20101027; CO 6220886 A2 20101119; DK 2234509 T3 20121008; EA 017412 B1 20121228; EA 201070770 A1 20101230; EP 2234509 A1 20101006; EP 2234509 B1 20120704; ES 2390740 T3 20121116; JP 2011505851 A 20110303; KR 20100094476 A 20100826; MY 148735 A 20130531; NZ 584674 A 20121221; PL 2234509 T3 20121130; PT 2234509 E 20120824; SI 2234509 T1 20120831; UA 99496 C2 20120827; US 2010006112 A1 20100114

DOCDB simple family (application)

EP 2008011108 W 20081222; AU 2008340634 A 20081222; BR PI0821407 A 20081222; CN 200880117548 A 20081222; CO 10087174 A 20100716; DK 08864391 T 20081222; EA 201070770 A 20081222; EP 08864391 A 20081222; ES 08864391 T 20081222; JP 2010538502 A 20081222; KR 20107011398 A 20081222; MY PI20101544 A 20081222; NZ 58467408 A 20081222; PL 08864391 T 20081222; PT 08864391 T 20081222; SI 200830691 T 20081222; UA A201007628 A 20081222; US 33853008 A 20081218