

Title (en)  
Segmented smoking article

Title (de)  
Segmentierter Rauchartikel

Title (fr)  
Article à fumer segmenté

Publication  
**EP 2647300 A2 20131009 (EN)**

Application  
**EP 13170124 A 20110427**

Priority

- US 77527810 A 20100506
- US 77513010 A 20100506
- US 85949410 A 20100819
- EP 11718610 A 20110427
- US 2011034040 W 20110427

Abstract (en)  
A cigarette comprising: a lighting end (14) and a mouth end (18); a mouth end piece segment (65) disposed at the mouth end; an aerosol-generation system disposed between the smokable segment and the mouth end piece segment, the aerosol-generation system including (i) a heat generation segment (35) immediately adjacent the lighting end, said heat generation segment having a length and including a heat source (40) and an insulation layer (42) of flame-retardant material, the insulation layer comprising: about 40 to about 50 percent, by weight, flue-cured tobacco lamina, about 20 to about 25 percent, by weight, water-soluble flue-cured tobacco stems extract, and about 20 to about 25 percent, by weight, wood pulp, wherein the insulation layer comprises a treatment of ammonium chloride and is configured with an inner-facing geometry configured to complementarily engage and longitudinally retain the heat source within the heat generation segment; and (ii) an aerosol-generating segment (51) incorporating aerosol-forming material (55), said aerosol-generating segment having a length and being disposed between, but physically separate from, each of the heat generation segment and the mouth end; a piece of outer wrapping material (64) oriented to provide an overwrap (i) around the aerosol-generating segment for at least a portion of its length, and (ii) around the heat generation segment for the length of that segment; those segments being connected together by the overwrap to provide a cigarette rod; and the mouth end piece segment being connected to the cigarette rod using tipping material (78).

IPC 8 full level  
**A24D 1/22** (2020.01)

CPC (source: EP US)  
**A24B 15/165** (2013.01 - EP US); **A24D 1/22** (2020.01 - EP US)

Citation (applicant)

- US 7503330 B2 20090317 - BORSCHKE AUGUST JOSEPH [US], et al
- US 2005274390 A1 20051215 - BANERJEE CHANDRA K [US], et al
- US 5285798 A 19940215 - BANERJEE CHANDRA K [US], et al
- US 7290549 B2 20071106 - BANERJEE CHANDRA KUMAR [US], et al
- US 2008092912 A1 20080424 - ROBINSON JOHN HOWARD [US], et al
- US 54610709 A 20090824
- US 5551451 A 19960903 - RIGGS DENNIS M [US], et al
- US 2009090373 A1 20090409 - BORSCHKE AUGUST JOSEPH [US], et al
- US 4922901 A 19900508 - BROOKS JOHNNY L [US], et al
- US 2009044818 A1 20090219 - TAKEUCHI MANABU [JP], et al
- US 5105831 A 19920421 - BANERJEE CHANDRA K [US], et al
- US 7479098 B2 20090120 - THOMAS TIMOTHY FREDERICK [US], et al
- US 2006272663 A1 20061207 - DUBE MICHAEL F [US], et al
- US 2009194118 A1 20090806 - ADEME BALAGER [US], et al
- US 2008029118 A1 20080207 - NELSON JOHN LARKIN [US], et al
- US 2008142028 A1 20080619 - FAGG BARRY SMITH [US]
- US 2008302373 A1 20081211 - STOKES CYNTHIA STEWART [US], et al
- US 2009028867 A1 20090129 - BROOKS PETER C [US], et al
- US 2009009037 A1 20090108 - KAWANISHI SHINGO [JP], et al
- US 5724997 A 19980310 - SMITH MICKEY LEE [US], et al
- US 2007215167 A1 20070920 - LLEWELLYN CROOKS EVON [US], et al
- US 4714082 A 19871222 - BANERJEE CHANDRA K [US], et al
- US 4756318 A 19880712 - CLEARMAN JACK F [US], et al
- US 4881556 A 19891121 - CLEARMAN JACK F [US], et al
- US 4989619 A 19910205 - CLEARMAN JACK F [US], et al
- US 5020548 A 19910604 - FARRIER ERNEST G [US], et al
- US 5027837 A 19910702 - CLEARMAN JACK F [US], et al
- US 5067499 A 19911126 - BANERJEE CHANDRA K [US], et al
- US 5076297 A 19911231 - FARRIER ERNEST G [US], et al
- US 5099861 A 19920331 - CLEARMAN JACK F [US], et al
- US 5129409 A 19920714 - WHITE JACKIE L [US], et al
- US 5148821 A 19920922 - BEST FREDDIE W [US], et al
- US 5156170 A 19921020 - CLEARMAN JACK F [US], et al
- US 5178167 A 19930112 - RIGGS DENNIS M [US], et al
- US 5211684 A 19930518 - SHANNON MICHAEL D [US], et al
- US 5247947 A 19930928 - CLEARMAN JACK F [US], et al
- US 5345955 A 19940913 - CLEARMAN JACK F [US], et al
- US 5469871 A 19951128 - BARNES VERNON B [US], et al
- US 5560376 A 19961001 - MEIRING ROBERT L [US], et al
- US 5706834 A 19980113 - MEIRING ROBERT LEONARD [US], et al

- US 5727571 A 19980317 - MEIRING ROBERT LEONARD [US], et al
- US 2010065075 A1 20100318 - BANERJEE CHANDRA KUMAR [US], et al
- US 4807809 A 19890228 - PRYOR JAMES W [US], et al
- US 4893637 A 19900116 - HANCOCK LLOYD H [US], et al
- US 4938238 A 19900703 - BARNES RUSSELL D [US], et al
- US 5027836 A 19910702 - SHANNON MICHAEL D [US], et al
- US 5065776 A 19911119 - LAWSON JERRY W [US], et al
- US 5105838 A 19920421 - WHITE JACKIE L [US], et al
- US 5119837 A
- US 5303720 A 19940419 - BANERJEE CHANDRA K [US], et al
- US 5396911 A 19950314 - CASEY III WILLIAM J [US], et al
- US 5546965 A 19960820 - WHITE JACKIE L [US]
- US 5902431 A 19990511 - WILKINSON DONALD ROSS [US], et al
- US 5944025 A 19990831 - COOK CHRISTOPHER J [US], et al
- US 5025814 A 19910625 - RAKER MARK L [US]
- US 2004173229 A1 20040909 - CROOKS EVON LLEWELLYN [US], et al
- US 2005066986 A1 20050331 - NESTOR TIMOTHY BRIAN [US], et al
- US 5183062 A 19930202 - CLEARMAN JACK F [US], et al
- US 5203355 A 19930420 - CLEARMAN JACK F [US], et al
- US 5588446 A 19961231 - CLEARMAN JACK F [US]
- DAVIS ET AL.: "Tobacco Production, Chemistry and Technology", 1999
- "Chemical and Biological Studies on New Cigarette Prototypes that Heat Instead of Burn Tobacco", 1988, R. J. REYNOLDS TOBACCO COMPANY MONOGRAPH
- INHALATION TOXICOLOGY, vol. 5, December 2000 (2000-12-01), pages 1 - 58

Cited by

US11730199B2

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 2011139730 A1 20111110**; CN 102946747 A 20130227; CN 102946747 B 20150624; CN 105124761 A 20151209; CN 105124761 B 20170829; EP 2566358 A1 20130313; EP 2566358 B1 20221005; EP 2647300 A2 20131009; EP 2647300 A3 20150107; EP 2647300 B1 20190424; EP 2647301 A2 20131009; EP 2647301 A3 20150107; EP 2647301 B1 20190828; EP 3520636 A1 20190807; EP 3520636 B1 20240417; JP 2013524850 A 20130620; JP 5976637 B2 20160823; PL 2566358 T3 20230102; PL 2647301 T3 20200331

DOCDB simple family (application)

**US 2011034040 W 20110427**; CN 201180031721 A 20110427; CN 201510348632 A 20110427; EP 11718610 A 20110427; EP 13170124 A 20110427; EP 13170148 A 20110427; EP 19162492 A 20110427; JP 2013509114 A 20110427; PL 11718610 T 20110427; PL 13170148 T 20110427