

Title (en)  
A carbonaceous fuel element for a smoking article.

Title (de)  
Kohlenhaltiges Brennstoffeinzerteil für Rauchartikel.

Title (fr)  
Élément combustible carboné pour article à fumer.

Publication  
**EP 0337508 A2 19891018 (EN)**

Application  
**EP 89110771 A 19850911**

Priority  
• EP 85111467 A 19850911  
• US 68453784 A 19841221  
• US 65060484 A 19840914

Abstract (en)  
The present invention relates to a smoking article which produces an aerosol that resembles tobacco smoke, but contains no more than a minimal amount of incomplete combustion or pyrolysis products. Preferred embodiments of the present smoking article comprise a short combustible carbonaceous fuel element, a heat stable substrate bearing an aerosol forming substance, a heat conducting member which contacts a portion of the fuel element and the substrate, and an insulating jacket surrounding at least a portion of the fuel element. The smoking article of the present invention is capable of providing an aerosol "smoke" which is chemically simple, consisting essentially of air, oxides of carbon, water, and the aerosol which carries any desired flavorants or other desired volatile materials, and trace amounts of other materials. The aerosol "smoke" from the preferred embodiments has no significant mutagenic activity as measured by the Ames Test. In addition, the article may be made virtually ashless so that the user does not have to remove any ash during use.

IPC 1-7  
**A24D 1/18**

IPC 8 full level  
**A24B 15/00** (2006.01); **A24D 1/18** (2006.01); **A24D 1/22** (2020.01); **A24D 3/06** (2006.01); **A61M 15/06** (2006.01); **F23Q 2/18** (2006.01)

IPC 8 main group level  
**A24D** (2006.01)

CPC (source: EP KR US)  
**A24B 15/16** (2013.01 - KR); **A24B 15/165** (2013.01 - EP US); **A24D 1/042** (2013.01 - KR); **A24D 1/18** (2013.01 - EP US); **A24D 1/22** (2020.01 - EP KR US); **A24F 40/40** (2020.01 - KR); **A24F 42/60** (2020.01 - KR)

Cited by  
EP4233568A4; US10440990B2; US9578897B2; WO2008121610A1; US10668058B2; EP2134395B1; WO2013072336A1; US9629393B2; EP3277107B1; EP3277107B2

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0174645 A2 19860319; EP 0174645 A3 19870506**; AT E110534 T1 19940915; AT E114413 T1 19941215; AT E114414 T1 19941215; AT E114415 T1 19941215; AT E126677 T1 19950915; AU 4696385 A 19860320; AU 5595590 A 19900920; AU 595483 B2 19900405; AU 623260 B2 19920507; BG 45382 A3 19890515; BG 46596 A3 19900115; BR 8504453 A 19860715; DE 3587920 D1 19941006; DE 3587920 T2 19950316; DE 3587951 D1 19950112; DE 3587951 T2 19950608; DE 3587952 D1 19950112; DE 3587952 T2 19950608; DE 3587954 D1 19950112; DE 3587954 T2 19950608; DE 3588051 D1 19950928; DE 3588051 T2 19960222; DK 166560 B1 19930614; DK 173975 B1 20020318; DK 174292 B1 20021125; DK 22691 A 19910211; DK 22691 D0 19910211; DK 22791 A 19910211; DK 22791 D0 19910211; DK 416785 A 19860315; DK 416785 D0 19850913; EG 16866 A 19890330; EP 0336458 A2 19891011; EP 0336458 A3 19900314; EP 0336458 B1 19941130; EP 0337506 A2 19891018; EP 0337506 A3 19900321; EP 0337506 B1 19941130; EP 0337507 A2 19891018; EP 0337507 A3 19901122; EP 0337508 A2 19891018; EP 0337508 A3 19900321; EP 0337508 B1 19950823; EP 0339689 A2 19891102; EP 0339689 A3 19900314; EP 0339689 B1 19941130; EP 0339690 A2 19891102; EP 0339690 A3 19900328; EP 0339690 B1 19940831; ES 296358 U 19880401; ES 296358 Y 19881116; ES 296359 U 19880216; ES 296359 Y 19881116; ES 296360 U 19880216; ES 296360 Y 19881116; FI 78228 B 19890331; FI 78228 C 19890710; FI 81949 B 19900928; FI 81949 C 19910110; FI 82592 B 19901231; FI 82592 C 19910410; FI 83382 B 19910328; FI 83382 C 19910710; FI 853486 A0 19850912; FI 853486 L 19860315; FI 870466 A0 19870204; FI 870466 A 19870204; FI 870467 A0 19870204; FI 870467 A 19870204; FI 883458 A0 19880721; FI 883458 A 19880721; GR 852205 B 19860114; HK 158396 A 19960830; HK 20095 A 19950224; HK 40796 A 19960315; HK 40896 A 19960315; HK 63095 A 19950505; HR P950147 B1 19960229; HU 202390 B 19910328; HU T40000 A 19861128; IE 65637 B1 19951101; IE 65679 B1 19951115; IE 65680 B1 19951115; IE 79075 B1 19980408; IE 80788 B1 19990424; IE 852050 L 19860314; IE 940573 L 19860314; IE 940574 L 19860314; IE 950597 L 19860314; IE 950598 L 19860314; IL 76195 A0 19851231; IL 76195 A 19890928; IN 164988 B 19890722; JP H0390161 A 19910416; JP H0390162 A 19910416; JP H0390163 A 19910416; JP H0558756 B2 19930827; JP H0558757 B2 19930827; JP H0626573 B2 19940413; KR 860002237 A 19860424; KR 910008187 B1 19911011; MA 20525 A1 19860401; MT P969 B 19860915; MX 162549 A 19910520; MX 172444 B 19931216; MX 173247 B 19940211; MY 100640 A 19901229; NO 169814 B 19920504; NO 169814 C 19920812; NO 171823 B 19930201; NO 171823 C 19930512; NO 172522 B 19930426; NO 172522 C 19930804; NO 853599 L 19860317; NO 902096 D0 19900511; NO 902096 L 19860317; NO 902097 D0 19900511; NO 902097 L 19860317; OA 08160 A 19870331; PL 154008 B1 19910628; PL 255348 A1 19861230; PT 81127 A 19851001; PT 81127 B 19950331; RO 93669 A 19880815; SG 178294 G 19950512; SG 23620 G 19950918; SI 8511441 A8 19960630; YU 144185 A 19870831; YU 43994 B 19900228; ZW 14685 A1 19851030

DOCDB simple family (application)  
**EP 85111467 A 19850911**; AT 89110764 T 19850911; AT 89110766 T 19850911; AT 89110768 T 19850911; AT 89110769 T 19850911; AT 89110771 T 19850911; AU 4696385 A 19850902; AU 5595590 A 19900524; BG 7976885 A 19850913; BG 7976985 A 19850903; BR 8504453 A 19850913; DE 3587920 T 19850911; DE 3587951 T 19850911; DE 3587952 T 19850911; DE 3587954 T 19850911; DE 3588051 T 19850911; DK 22691 A 19910211; DK 22791 A 19910211; DK 416785 A 19850913; EG 54985 A 19850905; EP 89110764 A 19850911; EP 89110765 A 19850911; EP 89110766 A 19850911; EP 89110768 A 19850911; EP 89110769 A 19850911;

EP 89110771 A 19850911; ES 296358 U 19870316; ES 296359 U 19870316; ES 296360 U 19870316; FI 853486 A 19850912;  
FI 870466 A 19870204; FI 870467 A 19870204; FI 883458 A 19880721; GR 850102205 A 19850911; HK 158396 A 19960822;  
HK 20095 A 19950216; HK 40796 A 19960307; HK 40896 A 19960307; HK 63095 A 19950427; HR P950147 A 19950327;  
HU 346785 A 19850913; IE 205085 A 19850820; IE 940573 A 19850820; IE 940574 A 19850820; IE 950597 A 19850820; IE 950598 A 19850820;  
IL 7619585 A 19850826; IN 809CA1987 A 19871016; JP 19320790 A 19900723; JP 19320890 A 19900723; JP 19320990 A 19900723;  
KR 850006707 A 19850913; MA 20751 A 19850912; MT P969 A 19850913; MX 20661685 A 19850913; MX 2359285 A 19850913;  
MX 2359385 A 19850913; MY PI19870805 A 19870613; NO 853599 A 19850913; NO 902096 A 19900511; NO 902097 A 19900511;  
OA 58675 A 19850910; PL 25534885 A 19850912; PT 8112785 A 19850913; RO 12010185 A 19850913; SG 178294 A 19941220;  
SG 1995904694 A 19850911; SI 8511441 A 19850913; YU 144185 A 19850913; ZW 14685 A 19850904