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(54) Title: REDUCTION OF POLYCYCLIC AROMATIC HYDROCARBONS IN TOBACCO SMOKE USING PALLADIUM SALTS

(57) Abstract: Methods for treating tobacco which result in the reduction of selected compounds from the tobacco smoke, and corresponding smoking articles containing this treated tobacco, are disclosed. In these methods, a solution containing a palladium salt is applied to the tobacco, preferably by spraying. The palladium salt preferably contains nitrate, chloride, acetate, citrate, gluconate, or salicylate as the anion. After application of the solution, the tobacco is preferably dried in an oven, by forced air, or by natural evaporation. The palladium in the treated tobacco results in the reduction in the level of polycyclic aromatic hydrocarbons, especially benzo(a)pyrene, from the total particulate matter in mainstream and sidestream smoke of the treated tobacco. The addition of mannitol and/or urea to the tobacco, and introduction of ventilation in a cigarette containing the treated tobacco, enhance the ability of palladium to reduce the level of polycyclic aromatic hydrocarbons in the smoke.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A24D3/16 A24B15/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 055 191 A (NORMAN VELLO ET AL) 25 October 1977 (1977-10-25)	1-7, 15-29, 32-35
Y	column 6, lines 12-16; claims 1,9; examples 1-5	8-14
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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X	EP 0 499 402 A (PHILIP MORRIS) 19 August 1992 (1992-08-19) page 4, lines 30-35,55-57; claims 1,8,17; examples 7-9 -----	1-7, 10-13, 15-37
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