

Title (en)

METHOD OF TREATING TOBACCO TO REDUCE NITROSAMINE CONTENT, AND PRODUCTS PRODUCED THEREBY

Title (de)

VERFAHREN ZUR TABAKBEHANDLUNG ZUR REDUZIERUNG DES NITROSAMINGEHALTES SOWIE DADURCH HERGESTELLTE PRODUKTE

Title (fr)

PROCEDES DE TRAITEMENT DU TABAC VISANT A REDUIRE LA TENEUR EN NITROSAMINES, ET PRODUITS RESULTANTS

Publication

EP 0991329 A4 20060614 (EN)

Application

EP 98929002 A 19980609

Priority

- US 9812128 W 19980609
- US 87990597 A 19970620
- US 99804397 A 19971223

Abstract (en)

[origin: WO9858555A1] Methods of reducing the content of and preventing formation of carcinogenic nitrosamines in harvested leafy plants such as tobacco and marijuana are disclosed. The methods are directed to subjecting the plant to microwave and/or higher frequency radiation, at appropriate times in the cure cycle. With tobacco, products suitable for human consumption, such as cigarettes, cigars, etc., can be made in accordance with the present invention, having contents of tobacco-specific nitrosamines on a par with fresh-cut, green tobacco. In preferred embodiments, the resultant tobacco products are dried, golden-yellow leaves having almost negligible amounts of the known carcinogens NNN and NNK, in comparison to conventionally cured tobacco.

IPC 1-7

A24B 3/10; **A24B 3/18**; **A24B 15/00**; **A24B 15/22**; **A24F 47/00**

IPC 8 full level

A24B 3/10 (2006.01); **A24B 3/12** (2006.01); **A24B 3/18** (2006.01); **A24B 15/00** (2006.01); **A24B 15/18** (2006.01); **A24B 15/22** (2006.01)

IPC 8 main group level

A24B (2006.01)

CPC (source: EP KR)

A24B 3/10 (2013.01 - KR); **A24B 15/18** (2013.01 - EP); **A24B 15/22** (2013.01 - EP)

Citation (search report)

- [PX] WO 9805226 A1 19980212 - WILLIAMS JONNIE R [US]
- [X] GB 706052 A 19540324 - HELVAR OY
- [A] GB 947280 A 19640122 - KURT KOERBER
- [X] US 4355648 A 19821026 - BOKELMAN GORDON H, et al
- [X] US 3378208 A 19680416 - CAMENISCH CARL R
- [X] US 3845774 A 19741105 - LOWE R, et al
- [A] US 3358694 A 19671219 - BOENIG HERMAN V, et al
- [A] DE 1767677 A1 19711125 - SCHERZ HEIMO DR
- [X] US 4192323 A 19800311 - HORNE WILLIAM P [US]
- [A] BURTON H R ET AL: "Influence of Temperature and Humidity on the Accumulation of Tobacco Specific Nitrosamines in Stored Burley Tobacco", JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 37, 1989, pages 1372 - 1377, XP002115112, ISSN: 0021-8561
- [A] CUI M ET AL: "Effect of maleic hydrazide application on accumulation of tobacco-specific nitrosamines in air-cured burley tobacco", JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY, AMERICAN CHEMICAL SOCIETY. WASHINGTON, US, vol. 42, no. 12, December 1994 (1994-12-01), pages 2912 - 2916, XP002985037, ISSN: 0021-8561
- See also references of WO 9858555A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9858555 A1 19981230; **WO 9858555 A9 19990408**; AP 1524 A 20051222; AP 2000001736 A0 20000331; AU 736493 B2 20010726; AU 8067098 A 19990104; BR 9810060 A 20020716; CA 2294130 A1 19981230; CA 2294130 C 20060905; CN 1135070 C 20040121; CN 1272768 A 20001108; EA 002448 B1 20020425; EA 200000053 A1 20000828; EE 9900590 A 20000815; EP 0991329 A1 20000412; EP 0991329 A4 20060614; GE P20022696 B 20020527; GE P20033111 B 20031125; HU P0002532 A2 20010228; HU P0002532 A3 20010328; IL 133583 A0 20010430; IL 133583 A 20030624; IL 154166 A0 20030731; IL 154166 A 20050925; IS 5311 A 19991220; JP 2002503965 A 20020205; JP 3996958 B2 20071024; KR 100458405 B1 20041126; KR 20010014034 A 20010226; NO 312325 B1 20020429; NO 996314 D0 19991217; NO 996314 L 20000216; NZ 501918 A 20011026; NZ 507948 A 20020201; OA 11240 A 20030530; OA 11738 A 20050513; PL 188860 B1 20050531; PL 337582 A1 20000828; TR 199903160 T2 20001023; TR 200200638 T2 20021223; TR 200200658 T2 20020923; YU 68799 A 20010528

DOCDB simple family (application)

US 9812128 W 19980609; AP 2000001736 A 19980609; AU 8067098 A 19980609; BR 9810060 A 19980609; CA 2294130 A 19980609; CN 98808356 A 19980609; EA 200000053 A 19980609; EE P9900590 A 19980609; EP 98929002 A 19980609; GE AP1998005156 A 19980609; GE AP1998005919 A 19980609; HU P0002532 A 19980609; IL 13358398 A 19980609; IL 15416603 A 20030129; IL 15416698 A 19980609; IS 5311 A 19991220; JP 50457799 A 19980609; KR 19997012064 A 19980609; NO 996314 A 19991217; NZ 50191898 A 19980609; NZ 50794898 A 19980609; OA 1200100168 A 19980609; OA 9900297 A 19991220; PL 33758298 A 19980609; TR 200200638 T 19980609; TR 200200658 T 19980609; TR 9903160 T 19980609; YU 68799 A 19980609