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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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(54) Title: METHOD FOR PRODUCING GLYCERIN FROM TOBACCO

(57) Abstract: A method for producing glycerin from one or more plants of genus *Nicotiana* is provided. The glycerin can be derived *inter alia* from *Nicotiana* species biomass or from seed. In certain embodiments, the glycerin is produced by either acid-catalyzed hydrolysis or base-catalyzed hydrolysis of acylglycerol-containing starting material derived from tobacco biomass or seed. The invention also provides articles and compositions including smoking articles and smokeless tobacco compositions that include glycerin produced from one or more plants of genus *Nicotiana*.



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A. CLASSIFICATION OF SUBJECT MATTER*A24D 3/00(2006.01)i, A24D 3/08(2006.01)i, A24D 1/00(2006.01)i*

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)

A24D 3/00; C07C 27/00; A24B 15/30; C11C 1/02; C10L 1/182; A24B 15/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: Glycerin, glycerol, Nicotiana, tobacco, smoke

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006-0191548 A1 (JAMES STRICKLAND et al.) 31 August 2006 See paragraphs [0004],[0008],[0023]	15-20
A	US 2010-0286420 A1 (AKATSUKA TAKEO et al.) 11 November 2010 See claim 1; paragraphs [0048]-[0049],[0054]	1-20
A	US 7638314 B2 (ZAPPI MARK E. et al.) 29 December 2009 See column 10 lines 13-16, column 15 lines 24-60	1-20
A	US 2007-0277432 A1 (JACKAM, J.P. et al.) 06 December 2007 See fig. 4; paragraphs [0073]-[0074],[0096]-[0098],[0120]	1-20



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/031473

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006-0191548 A1	31.08.2006	None	
US 2010-0286420 A1	11.11.2010	CN 101868525 A EP 2197995 A1 EP 2197995 A4 JP 2011-504516 A JP 2011-504516 T US 8093416 B2 WO 2009-066539 A1	20.10.2010 23.06.2010 15.06.2011 10.02.2011 10.02.2011 10.01.2012 28.05.2009
US 7638314 B2	29.12.2009	None	
US 2007-0277432 A1	06.12.2007	AU 2007-205806 A1 AU 2007-205806 B2 CA 2597183 A1 CN 101255346 A CN 101255346 C0 EP 1889899 A1 JP 2008-111098 A KR 10-2008-0015758 A US 2007-0277429 A1 US 2007-0277430 A1 US 7806945 B2 US 7871448 B2 US 8088183 B2	06.03.2008 04.03.2010 15.02.2008 03.09.2008 03.09.2008 20.02.2008 15.05.2008 20.02.2008 06.12.2007 06.12.2007 05.10.2010 18.01.2011 03.01.2012