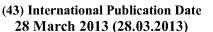
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A. CLASSIFICATION OF SUBJECT MATTER

C11D 1/02(2006.01)i, C11D 1/10(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)

C11D 1/02; C11D 3/37; C11D 3/38; C11D 3/20; C11D 3/34; C11D 1/722; A61K 8/81; C11D 17/00

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: concentrate, cleaner, alkyl polyglycoside, bio-based content

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
Х	WO 2011-055328 A2 (ECOLAB INC. et al.) 12 May 2011 See claims 1-14 and paragraphs [0011],[0041],[0042],[0051],[0055].	1-3,5,6,10,18-22 ,25	
A		4,7-9,11-17,23,24	
PX	WO 2011-161605 A2 (ECOLAB USA INC. et al.) 29 December 2011 See claims 1-22 and page 18, lines 3, 9, 10.	1-3,5,6,10,18-22 ,25	
A	US 2006-0135394 A1 (KIM SMITH et al.) 22 June 2006 See claims 1-31.	1-26	
A	US 7964544 B2 (SMITH KIM R. et al.) 21 June 2011 See claims 1-21.	1-26	
A	US 2007-0253926 A1 (TAMI TADROWSKI et al.) 01 November 2007 See claims 1-58.	1-26	

	Further documents are listed in the continuation of Box C.		See patent family annex.
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	means		being obvious to a person skilled in the art
"P"	document published prior to the international filing date but later	"&"	document member of the same patent family
	than the priority date claimed		- •

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20 MARCH 2013 (20.03.2013)	21 MARCH 2013 (21.03.2013)		
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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2011-055328 A2	12.05.2011	US 2011-0112009 A1 US 8216994 B2 WO 2011-055328 A3	12.05.2011 10.07.2012 13.10.2011
WO 2011-161605 A2	29.12.2011	US 2011-0312866 A1 US 2012-053111 A1 WO 2011-161605 A3	22.12.2011 01.03.2012 29.12.2011
US 2006-0135394 A1	22.06.2006	CA 2525216 A1	20.06.2006
US 7964544 B2	21.06.2011	US 2007-0099807 A1	03.05.2007
US 2007-0253926 A1	01.11.2007	AU 2007-243611 A1 BR P10710783 A2 CA 2645997 A1 CN 101432414 A EP 2013326 A1 EP 2163611 A1 JP 2009-535448 A KR 10-2009-0018074 A MX 2008012711 A WO 2007-127045 A1	08.11.2007 09.08.2011 08.11.2007 13.05.2009 14.01.2009 17.03.2010 01.10.2009 19.02.2009 15.10.2008 08.11.2007