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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,
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- (88) Date of publication of the international search report:
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(54) Title: IMPROVED COMPOSITION

(57) Abstract: The present invention provides the use of a composition comprising a polyalkyleneimine and/or salts or derivative thereof and an amphoteric polymer for the prevention of corrosion of non-metallic in organic items during a washing or rinsing process, in particular during an automatic dishwashing process.



WO 2012/153143 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/051030

A. CLASSIFICATION OF SUBJECT MATTER
INV. C11D3/37
ADD.

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

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 practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DATABASE WPI Week 200855 Thomson Scientific, London, GB; AN 2008-J48557 XP002683803, -& WO 2008/007590 A1 17 January 2008 (2008-01-17) paragraphs [0122], [0175] - [0177], [0182]; claim 1 abstract	1-5
X	----- WO 99/05248 A1 (UNILEVER PLC [GB]; UNILEVER NV [NL]) 4 February 1999 (1999-02-04) page 40 - page 42; claims 1-3, 5, 8, 9, 11-14; examples 1-5 ----- -/-	1-5,8



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

20 September 2012

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2012/051030

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

8, 9(completely); 1-7(partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/051030

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2010/020765 A1 (RECKITT BENCKISER NV [NL]; HAHN KARLHEINZ ULRICH G [DE]; WERNER KARIN) 25 February 2010 (2010-02-25) cited in the application claims -----	1-9
Y	FR 2 796 391 A1 (RHONE POULENC CHIMIE [FR]) 19 January 2001 (2001-01-19) claims 1, 8-10,14, 15; examples 13-19 -----	1-6,8,9
Y	WO 2007/022235 A1 (COLGATE PALMOLIVE CO [US]; DASTBAZ NATHALIE [BE]; SIMON JOELLE [BE]) 22 February 2007 (2007-02-22) claims; example -----	1-7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2012/051030

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2008007590	A1	17-01-2008	NONE
WO 9905248	A1	04-02-1999	AT 277998 T 15-10-2004 AU 8864298 A 16-02-1999 BR 9811023 A 19-09-2000 CA 2296719 A1 04-02-1999 DE 69826671 D1 04-11-2004 DE 69826671 T2 10-02-2005 EP 0998548 A1 10-05-2000 WO 9905248 A1 04-02-1999
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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 8, 9(completely); 1-7(partially)

an automatic dishwashing composition comprising a
polyalkyleneimine and/or salt or derivative thereof and at
least one amphoteric polymer

2. claims: 10(completely); 1-7(partially)

water softening salt composition comprising a
polyalkyleneimine and/or salt or derivative thereof and at
least one amphoteric polymer
