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| C. DOCUMENTS CONSIDERED TO BE RELEVANT   |  |  |                       |  |  |  |  |  |
| Category*  | Citation of document, with indication, where appropriate, of the rele  | evant passages   | Relevant to claim No. |  |  |  |  |  |
| X  | US 2008/178399 A1 (VENA LOU ANN [US] ET AL) 31 July 2008 (2008-0) paragraphs [0001], [0002], [0002], [0014], [0016] - [0077], [0101] [0117], [0134] - [0140] paragraphs [0159] - [0172] claims; figure | 1-17   |                       |  |  |  |  |  |
| А  | US 6 835 018 B2 (MICZEWSKI MELIS<br>[US] ET AL) 28 December 2004 (20)<br>the whole document  | 1-17   |                       |  |  |  |  |  |
| А  | WO 2006/060568 A1 (PROCTER & GAMI<br>BUREIKO ANDREI SERGEEVICH [GB];<br>OLIVIER) 8 June 2006 (2006-06-08<br>the whole document   | 1-17   |                       |  |  |  |  |  |
| Furth  | her documents are listed in the continuation of Box C.   | X See patent family annex.   |                       |  |  |  |  |  |
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## **INTERNATIONAL SEARCH REPORT**

Information on patent family members

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| Patent document cited in search report |    | Publication<br>date |  | Patent family<br>member(s)   | Publication<br>date  |
|--|----|---------------------|--|--|--|
| US 2008178399                          | A1 | 31-07-2008          | NONE   |  |  |
| US 6835018                             | B2 | 28-12-2004          | US<br>US                                     | 2004047672 A1<br>2005039272 A1   | 11-03-2004<br>24-02-2005   |
| WO 2006060568                          | A1 | 08-06-2006          | AU<br>BR<br>CA<br>CN<br>JP<br>JP<br>US<br>WO | 2005311859 A1<br>PI0518792 A2<br>2587768 A1<br>101068599 A<br>5318418 B2<br>2008521923 A<br>2006117498 A1<br>2006060568 A1 | 08-06-2006<br>09-12-2008<br>08-06-2006<br>07-11-2007<br>16-10-2013<br>26-06-2008<br>08-06-2006 |