Title: NON-CHLORINATED CONCENTRATED ALL-IN-ONE ACID DETERGENT AND METHOD FOR USING THE SAME

Abstract: Non-chlorinated concentrated acid detergent compositions and methods for using the same are provided. More particularly, the acid detergents comprise a quantity of a fatty alkyl-1,3diaminopropane or salt thereof and optionally alkylsulfinic acid. The detergents form the basis for an all-in-one cleaning, sanitizing, and descaling composition for use on soiled surfaces, particularly surfaces contaminated with milk soils and other food soils.
(88) Date of publication of the international search report:
      5 October 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC:
C 11 D 7/08 R (2006.01), 7/26 R (2006.01), 7/33 R (2006.01), 7/50 R (2006.01), 7/42 R (2006.01)

USPC: 510/218, 238, 253, 264, 269, 384, 385, 386, 388, 477, 488, 499, 505

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)
U.S.: 510/218, 238, 253, 264, 269, 384, 385, 386, 388, 477, 488, 499, 505

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
None

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tr>
<td>X</td>
<td>US 4,853,146 A (ROGRI et al) 01 August 1989 (01.08.1989), See Abstract, column 6, line 10 to column 7, line 50, col. 3, lines 20-40:</td>
<td>1-4, 11, 12, 14-16, 18-23, 26-29, 39, 40, 43, 47, 52</td>
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<td>5, 13, 17, 36-38</td>
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<td>US 2002/0082178 A (BESSE et al) 27 June 2002 (27.06.2002), See Abstract, See para. 9, See paras. 52-59, See paras. 65-68, See para 11; See paras. 73-75.</td>
<td>1-4, 6-12, 14-16, 18-33, 35, 39-52</td>
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<td>5, 13, 17, 34, 36-38</td>
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<td>Y</td>
<td>US 6,472,358 A (RICHTER et al) 29 October 2002 (29.10.2002), See Abstract; See column 4, lines 10-25.</td>
<td>13</td>
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<td>Y</td>
<td>US 2002/0193278 A (CERMENATI et al) 19 December 2002 (19.12.2002), See Abstract; See paras. 25-27; See paras. 59 and 60.</td>
<td>5, 17, 34, 36-38</td>
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</tbody>
</table>

Further documents are listed in the continuation of Box C. See patent family annex.

**Date of the actual completion of the international search**
19 June 2006 (19.06.2006)

**Date of mailing of the international search report**
26 JUL 2006

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