Abstract:
The subject invention provides methods for treating unroasted or green coffee beans to improve their quality of flavor to the palate, including reduced bitterness, better tasting, and improved aroma. In one embodiment, the invention pertains to the treatment of either green and un-dried, or green and dried, coffee beans with enzymes in a pH adjusted environment. According to the subject invention, the enzymes to be used, the pH of the treatment medium, and the times of treatment are parameters that are optimized based on different desired flavor and/or aroma outcomes.
INTERNATIONAL SEARCH REPORT

PCT/US2009/035138

A. CLASSIFICATION OF SUBJECT MATTER

A23F 5/00(2006.01)i, A23L 3/3463(2006.01)i, A23F 5/04(2006.01)i, A23F 5/12(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)


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 since 1975
Japanese Utility Models and Applications for Utility Models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS, WPI, USPTO, PAJ, NCBI, INSPECT "coffee bean, acid, enzyme, pepisin, proteases, phytases, lipases, roast, acidic solution, et al"

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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</thead>
<tbody>
<tr>
<td></td>
<td>&quot;Characterization of polyphenol oxidase in coffee&quot; - see the pages 290-291</td>
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<td>&quot;Acids in coffee XI The proportion of individual acids in the total titratable acid&quot; - see the whole document</td>
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<td>&quot;Caffeine-stimulated acid and pepisin secretion dose- response studties&quot; - see the whole document</td>
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<td></td>
<td>&quot;Elimination of bitter, disgusting tastes of drugs and foods by cyclodextrins&quot; - see the whole document</td>
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</tbody>
</table>

Date of the actual completion of the international search

07 OCTOBER 2009 (07 10 2009)

Date of mailing of the international search report

07 OCTOBER 2009 (07.10.2009)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 139 Seomsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Authorized officer

KIM Kee- Yeun

Facsimile No 82-42-472-7140

Telephone No 82-42-481-8387

Form PCT/ISA/210 (second sheet) (My 2008)