Title: INGREDIENT DELIVERY SYSTEM FOR POPCORN KERNELS

Abstract: An ingredient delivery system for popcorn kernels is described. The ingredient delivery system can include multiple layers. The synergy formed from the multiple layers of the ingredient delivery system results in a popped popcorn with minimal flaking and blow-off. Thus, a greater ingredient impact is imparted to the consumer. Also, the layer combination minimizes any hindrance of the natural popping action of the kernels. Thus, consumers have a greater pop volume for consumption.

FIG. 1

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A. CLASSIFICATION OF SUBJECT MATTER

A23G 3/52(2006.01)i, A23G 3/48(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)
A23G 3/52; A23B 4/00; A23L 1/237; A23D 7/00; A23L 1/10; A23L 1/36; A23L 1/18; A23L 1/22

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 practically, search terms used)
eKOMPASS(KIPO internal) & Keywords: popcorn, microwave popcorn package, oil/fat, ingredient delivery system, priming layer, ingredient layer, sealant component, starch component, gum component, ingredient component

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>
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<td>US 505312155 A (LEW; CHEL W. et al.) 21 July 1992 See column 4 lines 35-56 and claims 1-2, 6, 10-11</td>
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<td>A</td>
<td>US 6555147 B1 (XU; FENG) 29 April 2003 See claims 1-19</td>
<td>1-24</td>
</tr>
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<td>A</td>
<td>US 5284666 A (GRAF; ERNST) 08 February 1994 See abstract, claims 1-20</td>
<td>1-24</td>
</tr>
<tr>
<td>A</td>
<td>W0 01-17371 A1 (NOVO NORDISK BIOTECH, INC.) 15 March 2001 See claims 1-20</td>
<td>1-24</td>
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☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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Date of mailing of the international search report
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Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon Metropolitan City, 302-701, Republic of Korea

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Authorized officer
Park Jong Hoon
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<tr>
<td></td>
<td></td>
<td>EP 0371694 A3</td>
<td>22.08.1990</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 04880646 A</td>
<td>14.11.1989</td>
</tr>
<tr>
<td></td>
<td></td>
<td>US 05002785 A</td>
<td>26.03.1991</td>
</tr>
<tr>
<td>US 05750166 A</td>
<td>12.05.1998</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>US 6555147 B1</td>
<td>29.04.2003</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>US 05284666 A</td>
<td>08.02.1994</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>WO 01-17371 A1</td>
<td>15.03.2001</td>
<td>None</td>
<td></td>
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