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Declarations under Rule 4.17:

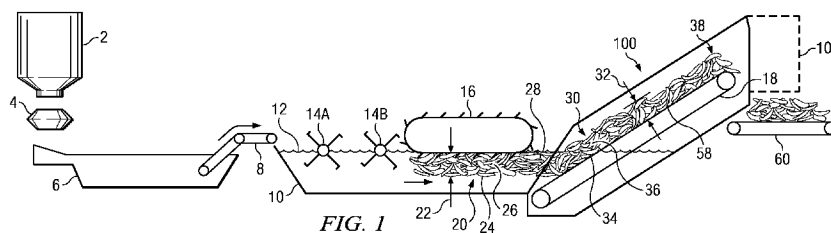
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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15 March 2012

(54) Title: CONTROLLED COOLING OF FOOD EXITING A FRYER



(57) Abstract: A method, system and apparatus for controlling the variability in acrylamide formation, reducing acrylamide formation, and reducing oil uptake in fried food pieces. The invention uses an extended hood over a takeout conveyor from a hot oil fryer to reduce the temperature gradient between the top and bottom of a product bed. Custom cooling and drying profiles can be designed using different configurations of the extended hood. Insulation and/or heaters can be provided above the product bed to slow the cooling rate of the top of the product bed. A cooler can be used to increase the cooling rate of the bottom of the product bed.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 11/44195

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A23L 1/01 (2011.01)

USPC - 426/637; 426/441; 426/466; 426/523

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)

IPC(8) - A23L 1/01 (2011.01)

USPC - 426/637; 426/441; 426/466; 426/523

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC - 426/

(Search term limited; see below)

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

PubWest (PGPB, USPT, EPAB, JPAB); Google

Search Terms Used: treat\$5, heat\$5, hood, post, cover, after, fry\$, conveyor, belt, transpor\$, moving, platform\$1, surface, automatic\$5, temperature, oven, fryer, frying, exit\$5, after\$5

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/0112177 A1 (BOURG et al.) 06 May 2010 (06.05.2010), Entire document, especially Abstract, para[0026]-[0033] and FIG. 3	1-4, 6, 8, 10-14, 16, 18, 20-25, 28, 29
Y		5, 7, 9, 15, 17, 19, 26, 27
Y	US 2006/0051468 A1 (BARRY et al.) 09 March 2006 (09.03.2006), Entire document, especially para[0048]-[0050], [0054]	5, 7, 15, 17, 26
Y	US 4,366,749 A (CARIDIS et al.) 04 January 1983 (04.01.1983), Entire document, especially Abstract; FIG. 2B	9, 19, 27
A	US 6,602,533 B1 (SMITH et al.) 05 August 2003 (05.08.2003), Entire document.	1-29
A	US 5,580,598 A (BENSON et al.) 03 December 1996 (03.12.1996), Entire document.	1-29
A	US 5,137,740 A (BENSON et al.) 11 August 1992 (11.08.1992), Entire document.	1-29
A	US 3,627,535 A (DAVIDSON et al.) 14 December 1971 (14.12.1971), Entire document.	1-29

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

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

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