

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 January 2004 (15.01.2004)

PCT

(10) International Publication Number
WO 2004/005819 A2

(51) International Patent Classification⁷:

F27D

(74) Agents: ELLSWORTH, Jeffrey, S. et al.; Senniger, Powers, Leavitt & Roedel, #1 Metropolitan Square, 16th Floor, St. Louis, MO 63102 (US).

(21) International Application Number:

PCT/US2003/020857

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 1 July 2003 (01.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/394,841

10 July 2002 (10.07.2002)

US

10/611,295

1 July 2003 (01.07.2003)

US

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): DUKE MANUFACTURING COMPANY [US/US]; 2305 N. Broadway, St. Louis, MO 63102 (US).

(71) Applicant and

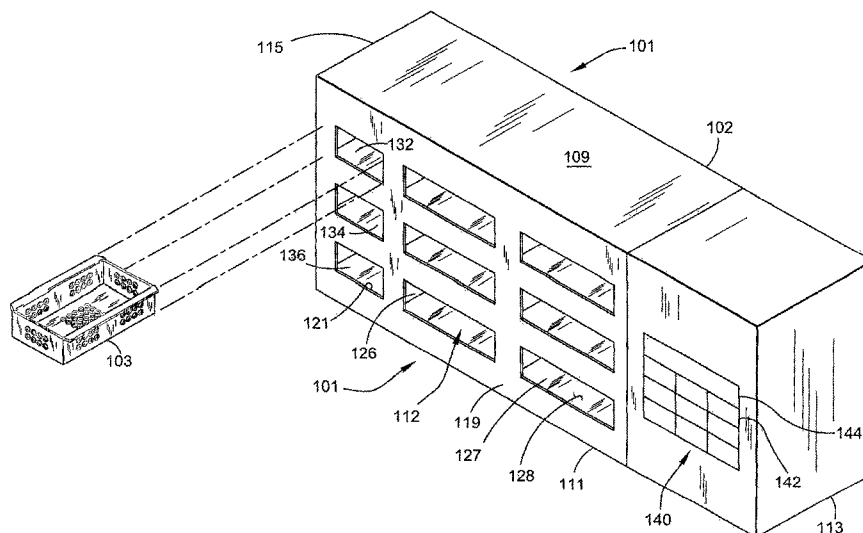
(72) Inventor: SHEI, Steven, M. [US/US]; 11334 Branstrator Road, Fort Wayne, IN 46809 (US).

Published:

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: FOOD WARMING APPARATUS AND METHOD



(57) Abstract: An oven for transferring heat to food in trays and a method for using the oven. The oven includes a cabinet with partitions dividing the interior into a plurality of separate, thermally isolated holding compartments each adapted for removably receiving a tray of food. Heat sources above the tray emit radiant heat to warm the food in the trays. A control mechanism controls the duration of the total hold time for the food having a duration of heated holding time during which a respective heat source is activated. The oven also includes a forced air mechanism under the control of the control mechanism for delivering forced air into the compartments. The heat sources are activated and deactivated during successive duty cycles to thereby to maintain the food in a respective compartment at a selected holding temperature for a duration of heated holding time.

WO 2004/005819 A2



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.