

PCT ORGANIZACION MUNDIAL DE LA PROPIEDAD INTELECTUAL
 Oficina Internacional
**SOLICITUD INTERNACIONAL PUBLICADA EN VIRTUD DEL TRATADO DE COOPERACION
 EN MATERIA DE PATENTES (PCT)**



(51) Clasificación Internacional de Patentes ⁷ : A23G 3/02, 7/00	A1	(11) Número de publicación internacional: WO 00/41573 (43) Fecha de publicación internacional: 20 de Julio de 2000 (20.07.00)
(21) Solicitud internacional: PCT/ES99/00003 (22) Fecha de la presentación internacional: 13 de Enero de 1999 (13.01.99) (71) Solicitante (para todos los Estados designados salvo US): CARUGIL, S.L. [ES/ES]; Pol. Ind. El Tiro, Avenida del Este, 6, E-30100 Espinardo (ES). (72) Inventores; e (75) Inventores/solicitantes (sólo US): HERNANDEZ VICENTE, Francisco [ES/ES]; Pol. Ind. El Tiro, Avenida del Este, 6, E-30100 Espinardo (ES). RUBIO GIL, Carlos [ES/ES]; Pol. Ind. El Tiro, Avenida del Este, 6, E-30100 Espinardo (ES). (74) Mandatario: ESTEBAN PEREZ-SERRANO, Mª Isabel; Explanada 8, E-28040 Madrid (ES).		(81) Estados designados: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, Patente ARIPO (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Patente euroasiática (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Patente europea (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), Patente OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Publicada <i>Con informe de búsqueda internacional.</i>

(54) Title: REFRIGERATION SYSTEM FOR CANDY FORMING MACHINES

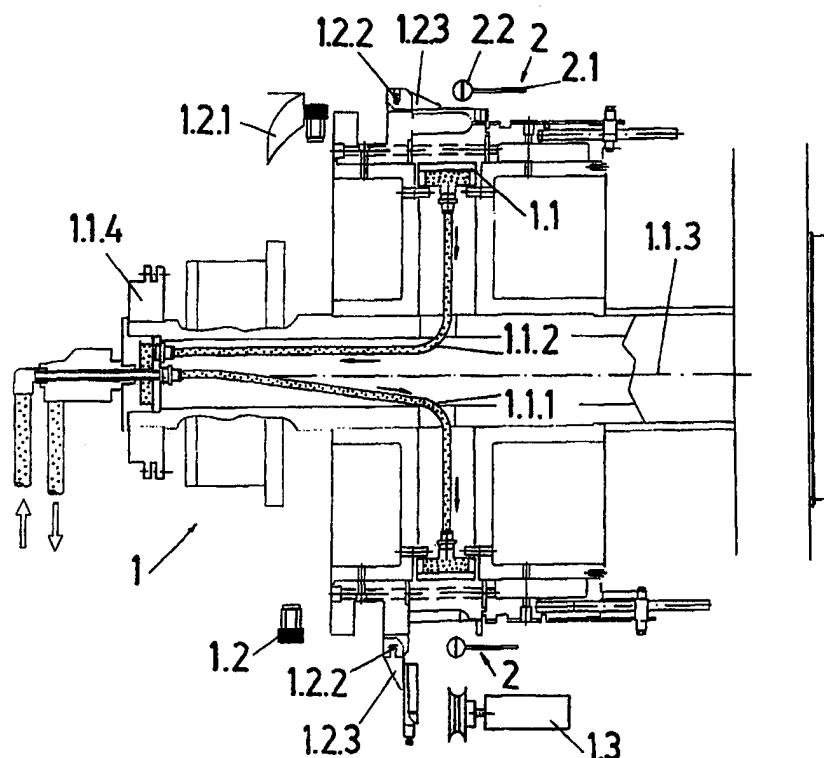
(54) Título: SISTEMA DE REFRIGERACION PARA TROQUELADORAS DE CARAMELOS

(57) Abstract

According to said system, the stamping head (1) includes a chamber (1.1) with a refrigerant circulating through supply lines (1.1.1) and return lines (1.1.2) having bent ends and providing access to the end areas of the head contacting the product (2), in addition to reinforcements for the die stamp in the form of end bearing (1.2), means for feeding (1.3) the candy separated from the stamping head, means for retaining the sticks (1.4), other means for quickly dismounting the stamping area (1.5), a supply and positioning system (1.6) for the sticks (2.1) and transmission means (1.7) to the head.

(57) Resumen

Incorpora en el cabezal (1) de troquelado una cámara (1.1) con un refrigerante, que circula por unos conductos de alimentación (1.1.1) y de retorno (1.1.2), con extremos quebrados, de acceso a las zonas extremas del cabezal en contacto con el producto (2), así como unos refuerzos del troquel mediante unos cojinetes extremos (1.2), unos medios de alimentación (1.3) del caramelo separados del cabezal de troquelado, otros de retención de palos (1.4), otros de desmontaje rápido de la zona de troquelado (1.5), así como un sistema de alimentación y posicionamiento (1.6) de palos (2.1) y unos medios de transmisión (1.7) al cabezal.



INTERNATIONAL SEARCH REPORT

International Application No

PCT/ES 99/00003

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A23G3/02 A23G7/00

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 7 A23G

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 1 809 358 A (E. S. SAVAGE) 9 June 1931 (1931-06-09) page 8, line 78 - line 87; figures 26,27 ---	1
A	US 3 541 973 A (C. H. AQUARIUS) 24 November 1970 (1970-11-24) the whole document ---	1
A	US 3 039 404 A (P.W.G. JOHNSTON ET AL.) 19 June 1962 (1962-06-19) the whole document ---	1
A	US 3 272 152 A (SHAFTER L. W.) 13 September 1966 (1966-09-13) the whole document --- -/--	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

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

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

27 August 1999

Date of mailing of the international search report

13/09/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Guyon, R

INTERNATIONAL SEARCH REPORT

Inter nal Application No
PCT/ES 99/00003

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 712 126 C (O. HÄNSEL) 18 September 1941 (1941-09-18) page 2, line 17 - line 32; claim 1; figure 2 ---	1
A	NL 13 785 C (SANDER MEIJER) 15 April 1925 (1925-04-15) the whole document ---	1
A	US 4 335 147 A (H. SOLLICH) 15 June 1982 (1982-06-15) the whole document ---	1
A	EP 0 073 535 A (AQUARIUS C H) 9 March 1983 (1983-03-09) ---	
A	WO 95 32633 A (AASTED) 7 December 1995 (1995-12-07) ---	
A	WO 98 30111 A (EARIS FRANK W ;HARDING WILLIAM (GB); STEPHENS STEVEN D (US); LEE R) 16 July 1998 (1998-07-16) the whole document -----	