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(71) Applicant (for all designated States except US): **SARONG SOCIETA'PER AZIONI** [IT/IT]; Via Colombo, 18, I-42046 Reggio Emilia (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BARTOLI, Alberto** [IT/IT]; Via Monte Gaio, 3, IT-42020 Quattro Castella (IT). **BARTOLI, Andrea** [IT/IT]; Via Victor Hugo, 23, I-42100 Reggio Emilia (IT). **FINETTI, Primo** [IT/IT]; Via Malavicina, 13, I-41037 Mirandola (IT).

(74) Agent: **LUPPI, Luigi**; Luppi & Associati S.R.L., Foro Buonaparte, 68, I-20121 Milano (IT).

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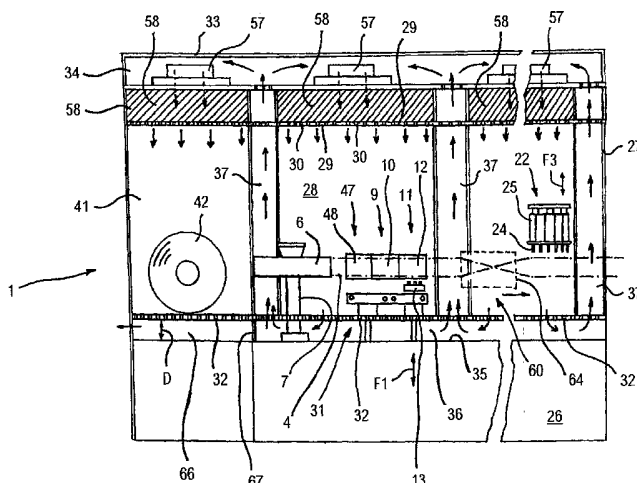
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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,

[Continued on next page]

(54) Title: APPARATUS FOR THERMOFORMING CONTAINERS WITH GUIDED STERILE FLUID FLOW AROUND THE WORKSTATIONS



(57) Abstract: Apparatus for thermoforming containers (2) by injection of a forming fluid comprises a plurality of workstations (9, 11, 22, 47) through which a sheet material is advanced (3, 4) to be thermoformed, flow generating means for generating a flow (38) of sterile fluid arranged for sterilizing said workstations (9, 11, 22, 47) and diffusing means (31; 80) arranged for guiding the streamlines of said flow (38) along preset trajectories (46); apparatus for thermoforming containers (2) by injection of a forming fluid comprises reel means (5, 6, 42) from which a sheet material (3, 4) to be thermoformed is unwound, a plurality of workstations (9, 11, 22, 47) through which said sheet material (3, 4) is advanced, said workstations (9, 11, 22, 47) being arranged inside chamber means (28) isolated from an external environment, and further chamber means (40, 41) isolated from an external environment and suitable for receiving said reel means (42) before said reel means (42) is introduced inside said chamber means (28).



- JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, 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, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, 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, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)*
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- 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.*

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/006524

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B29C49/00 B29C49/46

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 B29C

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)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 813 197 A (AGUZZOLI CARLO) 29 September 1998 (1998-09-29) column 2, lines 29-33 - column 6, lines 6-12; figure 1	1-24
A	----- PATENT ABSTRACTS OF JAPAN vol. 0091, no. 83 (M-400), 30 July 1985 (1985-07-30) & JP 60 049919 A (AIDA ENGINEERING KK), 19 March 1985 (1985-03-19) abstract	1-24
A	----- US 3 712 784 A (SIARD M ET AL) 23 January 1973 (1973-01-23) column 1, lines 58-68; figures 1,2 ----- -/--	1-24

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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"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

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"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

12 November 2004

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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

Mans, P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/006524

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3 930 779 A (FARRELL JOHN J) 6 January 1976 (1976-01-06) column 4, lines 52-54 - column 7, lines 45,46,67,68; figure 1 -----	1-24

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2004/006524

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-24

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-24

Apparatus for thermoforming containers with diffusing means for guiding the stream of sterile fluid along preset trajectories

2. claims: 25-48

Apparatus for thermoforming containers with chamber means for receiving reel means to be isolated from external environment

3. claims: 49, 50

Method of controlling containers or controlling the presence of contaminating elements between sheets by use of a television camera

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/006524

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