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DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP,
KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
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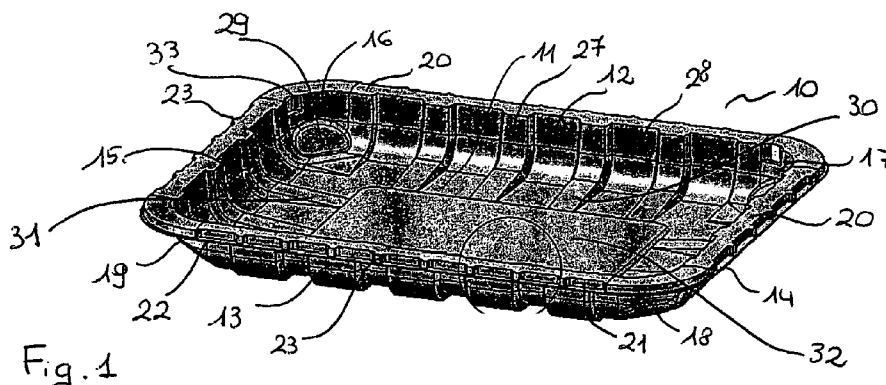
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(54) **Title:** THERMOPLASTIC TRAY



(57) **Abstract:** A solid thermoformed plastic tray (10) provided with a base (11), a plurality of sidewalls (12, 13, 14, 15) extend-
ing upwardly and slightly outwardly from said base (11), a primary flange (20) integrally joined to the upper edges of the side-
walls (12, 13, 14, 15) and extending outwardly all around the upper periphery of the sidewalls (12, 13, 14, 15), a rim (21), i.e., a
downward flap extending downwardly and tapering slightly outwardly from the outer periphery of the primary flange (20), and a
secondary flange (22), i.e., an overhanging portion extending outwardly from the lower edge of the rim (21), said tray being char-
acterised in that a plurality of strengthening ribs (23) extend substantially vertically along the rim (21) and outwardly with respect
to the tray body. The trays (10) according to the present invention have an improved rigidity and improved resistance to deforma-
tion and bending, improvements that have been achieved without increasing the amount of plastic material used for the manufac-
ture of the tray (10) but relying only on a specific geometry thereof.



INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2009/004125

A. CLASSIFICATION OF SUBJECT MATTER
INV. B65D1/34 B65D81/20

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)
B65D

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	GB 961 595 A (ROBERT HAROLD CARSON) 24 June 1964 (1964-06-24) page 2, line 55 - page 4, line 58; figures 7-9	1-5,8-15
Y	US 4 742 934 A (MICHAUD JOHN T [US] ET AL) 10 May 1988 (1988-05-10) column 3, line 62 - column 4, line 7; figure 3	1-5,8-15
Y	EP 0 690 012 A1 (GRACE W R & CO [US] CRYOVAC INC [US]) 3 January 1996 (1996-01-03) cited in the application page 2, line 5 - line 8; figure 3 page 11, line 24 - page 12, line 32; figure 4	8-15
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family 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

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INTERNATIONAL SEARCH REPORT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	NL 294 226 A (THE METAL BOX COMPANY LTD) 12 April 1965 (1965-04-12) page 3, line 21 - page 4, line 10; figure 1 -----	1,4-5

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2009/004125

Box No. 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 No. 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 fees, this Authority did not invite payment of additional fees.
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.:
1-5, 8-15
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.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ 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: 1-5

Strengthening the tray.

2. claim: 6

Enabling visual inspection of the products.

3. claim: 7

Preventing airflow through the walls of the tray.

4. claims: 8-15

Packaging a product.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/004125

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 961595	A	24-06-1964	NONE	
US 4742934	A	10-05-1988	NONE	
EP 0690012	A1	03-01-1996	AT 183471 T	15-09-1999
			AU 702738 B2	04-03-1999
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			DE 69511480 T2	13-04-2000
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			US 5916613 A	29-06-1999
			ZA 9505368 A	13-02-1996
NL 294226	A		NONE	