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- (71) Applicant: HOPPMANN CORPORATION [US/US];
14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US).
- (72) Inventors: SCHMITT, Werner, R.; Hoppmann Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US). KERBER, Horst; Hoppmann Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US). LIN, James, G.; Hoppmann Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US). PECK, Daniel, D.; Hoppmann Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US). ROBINSON, Dennis, L.; Hoppmann

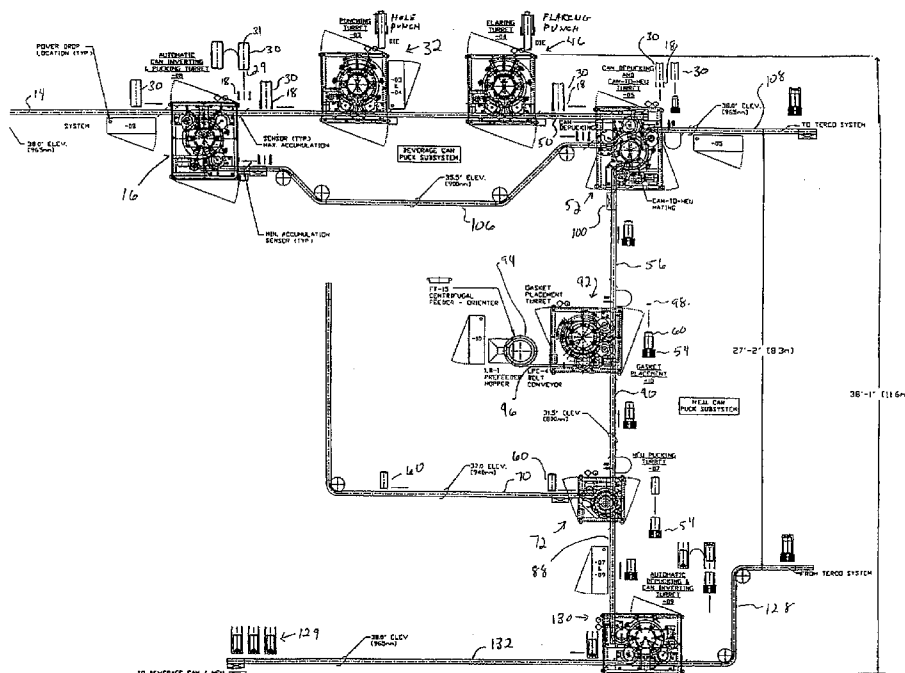
Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US). SCHOBER, Horstmar, A.; Hoppmann Corporation, 14560 Lee Road, P.O. Box 601, Chantilly, VA 22021-0601 (US).

- (74) Agents: MUNCY, Joe, McKinney et al.; Birch, Stewart, Koasch & Birch, LLP, P.O. Box 747, Falls Church, VA 22042-0747 (US).
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(54) Title: CAN ASSEMBLY SYSTEM



(57) Abstract: A system and method for assembling can includes a conveyor system (14,112,70,132) having various stations. Cans (30) of a larger first predetermined size can receive cans (60) of a smaller second predetermined size in the system and method. These cans can be mated to form an integral unit. A one-piece, two stage device (54) can be used to position the different sized can at a proper orientation prior to the step of mating. The system and method also provide for punching, flaring, gasket placement and other operations.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :B23P 11/00, 23/06; B23Q 3/06, 7/14

US CL : 29/430,455.1,564.2,776;269/289.R; 198/803,248/311.2

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)

U.S. : 29/430,447,455.1,564.2,773,776,784; 198/803.3,803.14; 269/9,289.R,303,319,909;248/311.2,314

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 practicable, 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.
X --- A	US 3,733,680 A (CARTWRIGHT) 22 MAY 1973, SEE FIGURE 3, COLUMN 2, LINES 45-57.	1 --- 2
X --- A	US 3,840,966 A (REID ET AL) 15 OCTOBER 1974, SEE FIGURE 1, COLUMN 2, LINES 31-45.	1 --- 2
X	US 4,546,529 A (LEON) 15 OCTOBER 1985, SEE FIGURE 1, COLUMN 2, LINES 1-16.	14
X	US, 5,634,256 A (FRITSCHI) 03 JUNE 1997, SEE FIGURE 1, COLUMN 4, LINES 1-18	14

 Further documents are listed in the continuation of Box C.
 See patent family annex.

* Special categories of cited documents:	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier document published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"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		

Date of the actual completion of the international search

26 AUGUST 1999

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18 NOV 1999

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 Box PCT
 Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

WILLIAM BRIGGS

Telephone No. (703) 308-1148

Sheila Vencey
Sheila Vencey
Paralegal Specialist
Technology Center 3700

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, 5,484,052 A (PAWLOSKI ET AL) 16 JANUARY 1996, SEE FIGURE 6.	14
A	US, 4,233,725 A (BURGER) 18 NOVEMBER 1980, SEE FIGURE 4.	14
A	US 5,897,090 A (SMITH ET AL) 27 APRIL 1999 SEE FIGURE 3	19

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international 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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

Group I claims 1-13, drawn to a can assembly device with the special technical feature of a conveyor.

Group II claims 14-18, drawn to a method of can assembly with the special technical feature of assembly, mating and machining operations

Group III claim 19 drawn to a two stage puck having the special technical feature of mating surfaces for cans.

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.:

Remark on Protest

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

No protest accompanied the payment of additional search fees.