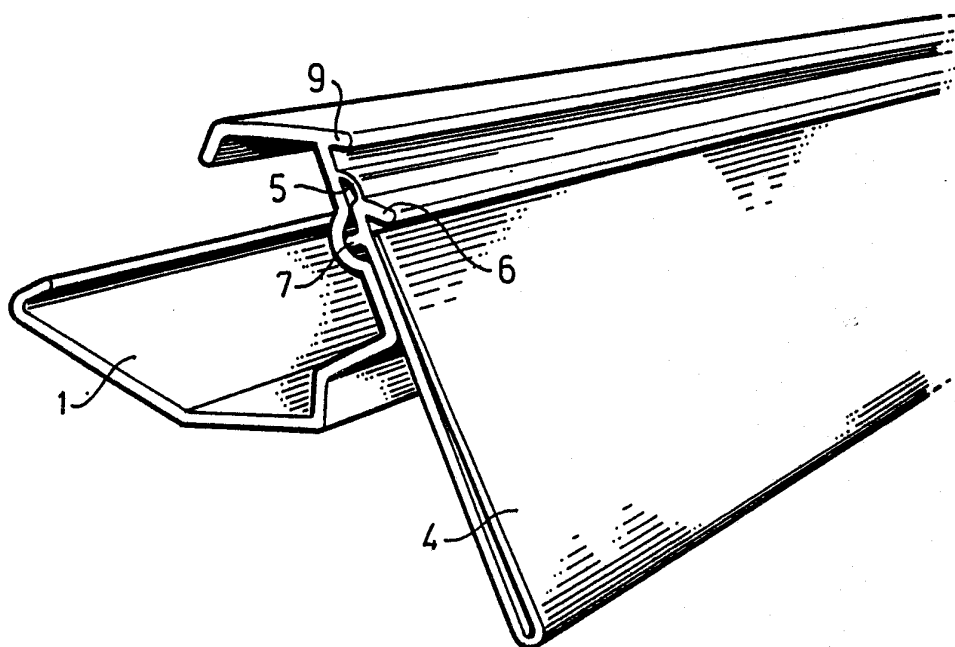




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(21) International Application Number: PCT/SE90/00644 (22) International Filing Date: 5 October 1990 (05.10.90) (30) Priority data: 8903299-9 6 October 1989 (06.10.89) SE (71) Applicant (for all designated States except US): HL DISPLAY AB [SE/SE]; Vendelsövägen 21, S-135 51 Tyresö (SE). (72) Inventor; and (75) Inventor/Applicant (for US only) : REMIUS, Lis [SE/SE]; Kulvägen 4, S-135 47 Tyresö (SE). (74) Agents: AXELSSON, Rolf et al.; Kransell & Wennborg AB, Sandhamnsgatan 42, S-115 28 Stockholm (SE).		(81) Designated States: AT (European patent), AU, BE (European patent), CH (European patent), DE (European patent), DK (European patent), ES (European patent), FI, FR (European patent), GB (European patent), IT (European patent), LU (European patent), NL (European patent), NO, SE (European patent), US. Published <i>With international search report.</i>

(54) Title: A DEVICE FOR HOLDING STRIP-LIKE INFORMATION CARRIERS

**(57) Abstract**

A holder for holding strip-like information carriers (3) includes a fitting (1) to which there is connected a holder part (4) which accommodates the information carriers. The holder is intended particularly for use in food stores and departmental stores. The holder part (4), which accommodates the information carriers, is pivotally attached to the fitting (1), so that the part (4) can be swung from a lowered position, in which information facing towards one side of the part can be read, to a raised position in which information facing the other side of the part can be read. The holder is also configured so that when lifted to its raised position, the holder part intended to accommodate the information carrier will remain in its raised position until it is again lowered.

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A Device for Holding Strip-Like Information Carriers

The present invention relates to a device intended for holding strip-like information carriers and being of the kind which includes a fitting or bracket structure which has connected thereto a part for accommodating information carriers.

Holders of this kind are used to a large extent in grocery stores and in departmental stores for instance, for the purpose of displaying information relating to the goods on sale and also the price of the goods.

The holders are intended to be placed on the edge surfaces of shelves, on wire-baskets or trays, and on partition walls which separate mutually adjacent compartments of goods display cabinets or chests, for instance. These holders must be simple to use, i.e. enable information carriers to be readily placed therein, should not collect dirt and dust, and should be easily cleaned. The holders should also be capable of presenting information to the customer clearly and should be simple and inexpensive to produce.

A holder which fulfills these requirements or desiderata in general is described and illustrated in U.S. Patent Specification 4,295,288, which has been assigned to Applicants in the present case.

In recent times, however, there has been an increasing need to also display information which is of interest solely to store personnel, for instance the article number of the goods displayed, etc. This latter type of information, which is utilized for stock handling purposes, among other things, is normally in the form

of an automatically readable bar code or some like code. However, excessive information on cards or labels pertaining to specific goods or items and including references which are irrelevant to the customer can be confusing at times, and also misleading. Furthermore, a standard card or label may have insufficient space for the inclusion of administrative information.

These problems are solved by means of the present invention, by configuring the holder so that information can be presented on two sides thereof, wherein one side can present information relevant to the customer and the other side can present information relative to store personnel.

Thus, there is provided in accordance with the present invention a holder of the aforescribed kind which is characterized in that the holder part intended to receive an information carrier is connected pivotally to the holder fitting, such as to be pivotal from a lower position in which information can be read from one side of said part, to a raised position in which information can be read from the other side of said part; and in that the holder is so constructed that subsequent to being raised said information-carrying part will remain in its raised position until being physically lowered.

Thus, the inventive holder enables information of interest to the customer to be read readily when said holder part is in its lowered position for instance, and to enable information concerning store personnel to be read readily when said part is in its raised position. Since the information-carrying part of the holder remains in its raised position, both hands can be used

for writing information on a piece of paper or for using a pen reader for automatically recording the information presented.

5 The holder part which accommodates the information carrier is preferably connected to the fitting structure at its upper end, through elastic or resilient hinge means, and in that said parts are provided with mutually coacting devices which releasably latch the
10 information-carrying part in its raised position. This latching of the information-carrying part is achieved through the action of the simple and effective resilient hinge means.

15 According to one preferred embodiment of the invention, the information-carrying part of the holder has the form of a transparent pocket which is open along its upper edge, and the holder fitting is constructed or configured in a manner such that when the pocket
20 occupies its lowered position pressure on the lower part of the front surface of said pocket will widen the pocket opening. This facilitates the exchange of information carriers, and particularly the handling of short information cards or labels.

25 It is preferred that when the pocket is in its lowered position, the rear pocket wall will be higher than the front pocket wall, and provided with cover means which protects the pocket opening. The pocket is also conveniently provided with at least one guide bar for guiding a pen reader or the like so as to facilitate automatic reading of information facing towards one side of the
30 pocket. The guide bars are preferably disposed along the upper edge of that pocket wall which constitutes the rear wall in the downwardly swung position of the pocket, which
35

means, among other things, that the front surface of the pocket will be completely smooth.

5 In order to enable the pocket to be latched effectively in its raised position, the holder fitting is preferably provided with an outwardly projecting part which is received in a notch-like recess between the front wall of the pocket and the aforementioned cover means, when the pocket occupies its raised position.

10 As an alternative to a latching mechanism, the holder fitting may be configured so that in its raised position the pocket will form an angle with the vertical such as to remain in its raised position under its own virtues, i.e. without the aid of mechanical means.

15 From the aspect of manufacture, it is preferred that all parts of the holder are formed integrally with one another, suitably by co-extrusion, so as to obtain a one-piece structure.

20 Other characteristic features of the invention are set forth in the following Claims.

25 The invention will now be described in more detail with reference to the accompanying drawings, which illustrate an exemplifying embodiment of an inventive holder.

30 Figure 1 illustrates in perspective an inventive holder with the information-carrying pocket in a downwardly swung position.

35 Figure 2 illustrates how the pocket of Figure 1 is opened.

Figure 3 is a perspective view of the holder, with the information-carrying pocket in its raised, upwardly swung position.

5 The holder illustrated in the drawings includes a fitting 1, which in the case of the illustrated embodiment is intended to be fitted to the front edge of a store shelf 2, as shown schematically in Figure 2, or to some equivalent support means. The fitting 1, however, can be given any desired configuration, for instance so as to enable the holder to be fitted to wire-baskets or trays to the upper edge surface of compartment partitioning walls, or some like surface.

10

15 In order to enable the holder to support information carriers, which in the embodiment of Figure 2 have the form of short cards or labels 3, the fitting 1 has connected thereto a pocket 4 which is open along its upper edge. The pocket

20 4 is joined to the fitting 1 by means of a flexible, preferably elastic material part 5. The fitting 1, the pocket 4 and the material or hinge part 5 are preferably extruded in the form of an integrated profile section, using appropriate co-extrusion techniques.

25 Both the fitting 1 and the pocket 4 will preferably comprise PVC-material. The material from which the pocket is being made will then be fully transparent. The hinge means 5 may consist of a synthetic rubber material, such as the material sold under the name

30 Alcryn by DuPont.

Thus, the inventive holder can be produced in a simple and rational manner, and enables the information-carrying cards or labels 3 to be changed in a very

35 simple fashion. As illustrated in Figure 2, a card or

label change is effected, by pressing against the bottom edge of the front wall of the pocket 4 with the thumb of one hand, for instance. The pocket opening along the upper edge part of said pocket is widened therewith, as a result of the coaction between the rear wall of the pocket and the adjacently lying part of the fitting 1, thereby enabling an information carrier to be readily inserted into and removed from the pocket. Thus, it is important that the pocket is mounted on a fitting which is constructed so as to provide a counter-pressure surface for the rear pocket wall, so as to enable the pocket opening to be widened. Alternatively, the pocket can be mounted on, for instance, the front edge surface of a shelf, so that the shelf itself, or a thin strip attached thereto, will function as a counter-pressure means. In this case, the fitting 1 can be replaced with a flat strip affixed to the front edge surface of the shelf, with the aid of self-adhesive tape or the like. The bottom edge of the shelf can then serve as a pivot point for bending or pivoting of the pocket.

In order to maintain a high state of hygiene and to prevent dust and dirt from penetrating down into the pocket through its opening, the rear wall of the pocket of the illustrated embodiment is provided with a cover part 6 which protects the pocket opening.

In the downwardly pivoted position of the pocket of the embodiment illustrated in Figures 1 and 2, the information carried by the information carrier and facing towards the front side of the pocket can be easily read by the customer. In order not to confuse this information with information directed to store personnel with respect to the specific goods concerned, this informa-

tion is presented on the rear side of the information carrier or card 3, or on a separate card which faces towards the rear wall of the pocket.

5 When wishing to read the information presented on the rear side of the information carrier, or card, which is normally effected with the aid of an optical light pen, the pocket 4 is pivoted to its other position, as illustrated in Figure 3. The rear wall of the pocket
10 preferably has provided thereon a guide bar 7 which, in the said other position of the pocket, functions as a guide for the light pen or light device when reading, for instance, a bar code 8.

15 In the case of the illustrated embodiment, the pocket 4 is held in its raised position by a snap-lock device comprising a slot-like space defined between the upper edge of the front wall of the pocket 4 and the cover part 6, and an outwardly projecting part 9 on the
20 fitting 1, said outwardly projecting part being received in said slot-like space. The snapping action is improved when the hinge part 5 is elastic.

Although the above-described locking mechanism by means
25 of which the pocket is held in its raised position is highly advantageous, it will be understood that the pocket can be held raised in other ways. For instance, the fitting 1 can be constructed so that the pocket 4 will only support against the fitting in a position
30 such that the angle defined by the pocket with the vertical will cause the pocket to remain in its raised position by itself. This can also be achieved by mounting the pocket 4 in a manner such that when in its raised position the pocket will support against the
35 front edge surface of a shelf or against a shelf

element or a wire-basket element.

5 In the case of the illustrated embodiment with the
guide bar 7 located on the rear side of the pocket, the
pocket will present a completely smooth front surface
when the pocket occupies its downwardly swung position,
which is an advantage. However, if desired in order to
satisfy some specific application, the information
presented in the raised position of the pocket can be
10 intended for the customer and the information which can
be read-off in the downwardly swung position of the
pocket may be intended for store personnel. In this
case, a guide bar is preferably provided along the
lower edge of the pocket front wall. The pocket may
15 also be replaced with a pivotal plate and information
presented on both sides of the plate.

The precise configuration of an inventive holder can
also be varied in other respects within the scope of
20 the following Claims. For instance, the hinge part 5
may consist of other hinge means than that described,
such as short material parts which are welded to the
fitting 1 and to the pocket 4 respectively.

CLAIMS

1. A holder for holding strip-like information carriers and comprising a fitting (1) which has
5 connected therewith a part (4) for accommodating said information carriers, c h a r a c t e r i z e d in that the holder part (4) intended for accommodating an information carrier (3) is pivotally connected to the fitting (1) in a manner which will enable said part to
10 be swung from a lowered position, in which information facing towards one side of said part can be read, to a raised position in which information facing towards the other side of said part can be read; and in that the holder is so constructed that subsequent to being
15 raised to its raised position the holder part (4), which accommodates said information carrier, will remain in said raised position until it is again lowered.

20 2. A holder according to Claim 1, c h a r a c - t e r i z e d in that the upper side of the holder part (4) accommodating said information carrier is connected to the fitting (1) by means of a hinge formed from a material part (5) of elastic material.

25 3. A holder according to Claim 1 or 2, c h a r - a c t e r i z e d in that the fitting (1) and the holder part (4) which accommodates the information carrier are provided with mutually coacting means
30 (9, 6) which releasably latch the holder part (4) in its raised position.

4. A holder according to any one of Claims 1-3, c h a r a c t e r i z e d in that the holder part
35 intended to accommodate an information carrier has the

form of a transparent pocket (4) which is open along its upper edge; and in that the fitting (1) is constructed or configured so that when mounted in position a pressure exerted on the bottom part of the front surface of the pocket in its downwardly swung position thereof will cause the pocket opening to widen.

5. A holder according to Claim 4, characterized in that in the downwardly swung position of the pocket (4) the rear wall of said pocket is higher than the front wall thereof and provided with a cover part (6) which protects the pocket opening; and in that the pocket is provided with at least one guide bar (7) which functions to guide a pen reader or like device in order to facilitate automatic reading of information facing towards one side of the pocket.

6. A holder according to Claim 5, characterized in that the guide bar (7) is arranged along the upper edge of that pocket wall which constitutes the rear wall in the downwardly swung position of the pocket (4).

7. A holder according to Claim 5 or 6, characterized in that the fitting (1) is provided with an outwardly projecting part (9) which, in the raised position of the pocket (4), is received in a slot-like space defined between said front wall and the cover part (6) such as to latch the pocket in its raised position.

8. A holder according to any one of Claims 1-7, characterized in that the fitting (1) is so configured that when in its raised position the

holder part (4) intended to accommodate an information carrier defines with the vertical an angle at which the pocket will remain in its raised position without the need of mechanical latching means.

5

9. A holder according to any one of Claims 1-8, characterized in that the fitting (1) has the form of a profiled section intended to be mounted on the front edge surface of a shelf, the upper edge surface of a compartment partitioning wall, a wire-basket or like device.

10

10. A holder according to any one of Claims 1-8, characterized in that the fitting (1) has the form of a substantially flat strip which is intended to be fitted onto the front edge of a shelf or the like, such that the holder part (4) which accommodates said information carrier projects beneath the shelf plane.

15

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11. A holder according to any one of Claims 1-10, characterized in that all holder parts are produced integrally by co-extrusion techniques.

1/2

Fig. 1

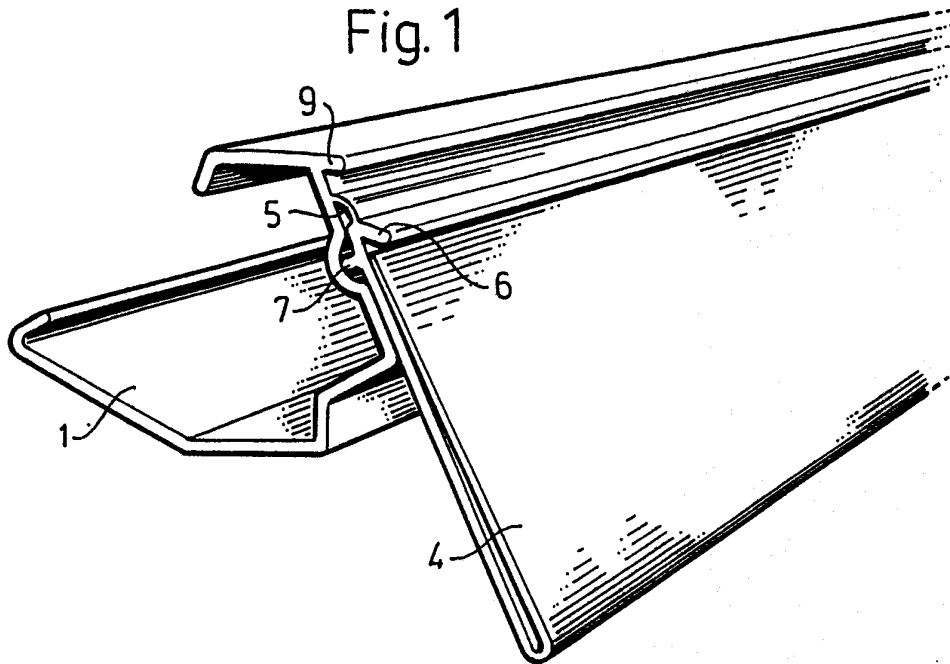


Fig. 2

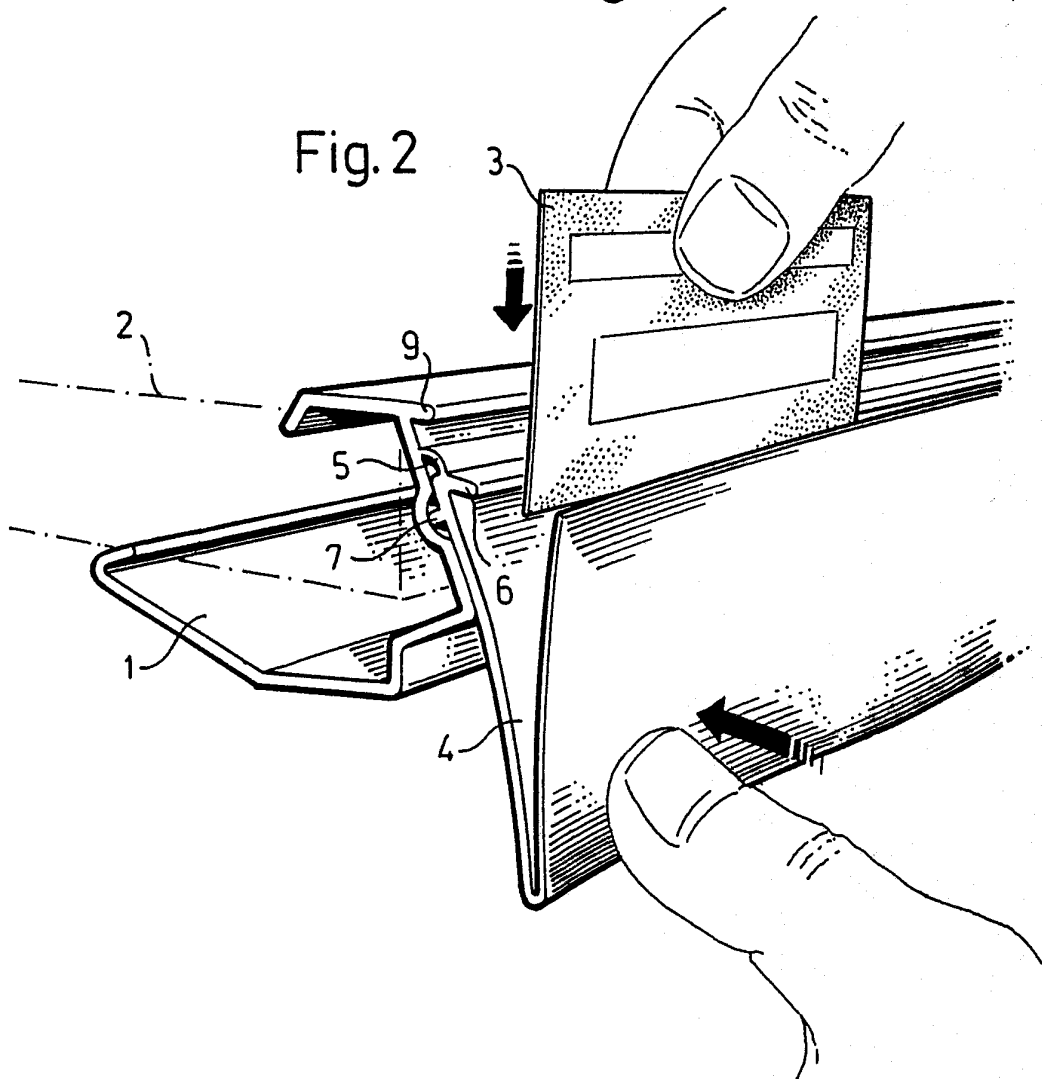
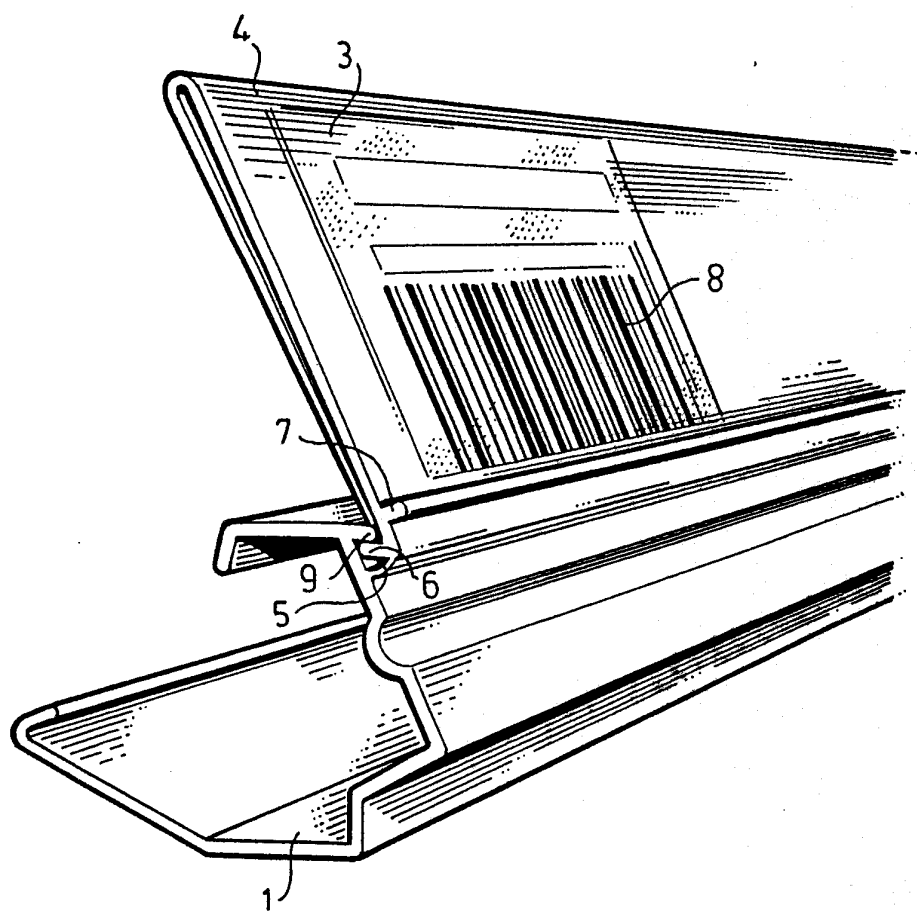


Fig. 3



INTERNATIONAL SEARCH REPORT

International Application No PCT/SE 90/00644

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶ According to International Patent Classification (IPC) or to both National Classification and IPC IPC5: G 09 F 3/20																				
II. FIELDS SEARCHED <div style="text-align: right; margin-right: 50px;">Minimum Documentation Searched⁷</div> <table style="width: 100%; border: none;"> <tr> <td style="width: 25%; border: none;">Classification System</td> <td style="border: none;">Classification Symbols</td> </tr> <tr> <td style="border: none; height: 40px; vertical-align: bottom;">IPC5</td> <td style="border: none; vertical-align: bottom;">G 09 F</td> </tr> </table> <div style="text-align: center; margin-top: 10px;">Documentation Searched other than Minimum Documentation to the extent that such Documents are Included in Fields Searched⁸</div> <div style="margin-top: 20px;">SE,DK,FI,NO classes as above</div>			Classification System	Classification Symbols	IPC5	G 09 F														
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III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Category *</th> <th style="width: 70%;">Citation of Document,¹¹ with indication, where appropriate, of the relevant passages¹²</th> <th style="width: 20%;">Relevant to Claim No.¹³</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">A</td> <td>US, A, 4295288 (WESTBERG) 20 October 1981, see the whole document --</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">A</td> <td>US, A, 4281469 (FEIBELMAN) 4 August 1981, see the whole document --</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">A</td> <td>US, A, 3324585 (H. J. FREDERICKSON) 13 June 1967, see the whole document --</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">A</td> <td>US, A, 2800732 (F. W. DURAN) 30 July 1957, see the whole document --</td> <td style="text-align: center;">1</td> </tr> <tr> <td style="text-align: center;">A</td> <td>EP, A, 205708 (LINDE AKTIENGESELLSCHAFT) 30 December 1986, see the whole document -- -----</td> <td style="text-align: center;">1</td> </tr> </tbody> </table>			Category *	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³	A	US, A, 4295288 (WESTBERG) 20 October 1981, see the whole document --	1	A	US, A, 4281469 (FEIBELMAN) 4 August 1981, see the whole document --	1	A	US, A, 3324585 (H. J. FREDERICKSON) 13 June 1967, see the whole document --	1	A	US, A, 2800732 (F. W. DURAN) 30 July 1957, see the whole document --	1	A	EP, A, 205708 (LINDE AKTIENGESELLSCHAFT) 30 December 1986, see the whole document -- -----	1
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<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>* Special categories of cited documents:¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 48%;"> <p>"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</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"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.</p> <p>"&" document member of the same patent family</p> </div> </div>																				
IV. CERTIFICATION <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> Date of the Actual Completion of the International Search 19th December 1990 </td> <td style="width: 50%; border: none;"> Date of Mailing of this International Search Report 1991 - 01 - 03 </td> </tr> <tr> <td style="border: none;"> International Searching Authority <div style="text-align: center; margin-top: 20px;">SWEDISH PATENT OFFICE</div> </td> <td style="border: none;"> Signature of Authorized Officer Manfred Weiss </td> </tr> </table>			Date of the Actual Completion of the International Search 19th December 1990	Date of Mailing of this International Search Report 1991 - 01 - 03	International Searching Authority <div style="text-align: center; margin-top: 20px;">SWEDISH PATENT OFFICE</div>	Signature of Authorized Officer Manfred Weiss														
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**ANNEX TO THE INTERNATIONAL SEARCH REPORT
ON INTERNATIONAL PATENT APPLICATION NO.PCT/SE 90/00644**

This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the Swedish Patent Office EDP file on **90-11-28**.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 4295288	81-10-20	AU-B- 509751	80-05-22
		AU-D- 2948577	79-04-12
		DE-A-C- 2746118	78-04-20
		FR-A-B- 2368104	78-05-12
		GB-A- 1586315	81-03-18
		JP-C- 1418711	87-12-22
		JP-A- 53049999	78-05-06
		JP-B- 62023314	87-05-22
		NL-A- 7711334	78-04-18
		SE-B-C- 402662	78-07-10
		SE-A- 7611481	78-04-16
US-A- 4281469	81-08-04	GB-A-B- 2061104	81-05-13
US-A- 3324585	67-06-13	NONE	
US-A- 2800732	57-07-30	NONE	
EP-A- 205708	86-12-30	NONE	