Trial decision

Invalidation No. 2011-800009

Kanagawa, Japan

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The decision on the case of the patent invalidation trial between the above parties on Japanese Patent No. 2851237, entitled " BOOK STORING AND MANAGING DEVICE," dated December 21, 2011, came with a court decision of revocation of the trial decision (2012 (Gyo-Ke) 10038, rendition of decision on December 11, 2012) at the Intellectual Property High Court, the case was proceeded further, and another trial decision was handed down as follows.

Conclusion

The correction shall be approved.

The patent for the invention described in Claims 1, 2, and 7 of Patent No. 2851237 shall be invalidated.

The costs in connection with the trial shall be borne by the demandee.

Reasons

1. History of the procedures

(1) A patent application for the invention according to Claims 1 to 7 of Patent No. 2851237 of the case was filed on April 20, 1994, and the establishment of patent right was registered on November 13, 1998.

(2) Against this, Okamura Seisakusho KK (hereinafter referred to as "demandant") demanded a trial for patent invalidation of this case on January 19, 2011 (date of submission), submitted Evidences A No. 1 to 18 as means of proof, submitted a Written amendment on March 9, 2011, and corrected the reason for the demand for trial and means of proof (hereinafter, the written demand for trial corrected with the written amendment of March 9, 2011 is referred to as "the written demand for trial after correction").

(3) NIPPON FILING CO., Ltd. (hereinafter referred to as "demandee") submitted a written

reply and a Evidences B No. 1 and No. 2 and means of proof on May 16, 2011, submitted a Written demand for correction (hereinafter, the correction demanded by the demandee with the written demand for correction is referred to as "Correction of the case") on May 16, 2011, and submitted a Written statement on May 19, 2011.

(4) Against this, the demandant submitted a Written refutation of the trial case on June 30, 2011, and submitted Evidences A No. 19 to 27 as means of proof.

(5) Thereafter, the demandant submitted an Oral proceedings statement brief on October 24, 2011, and submitted Evidences A No. 28 and No. 29. The demandee a submitted Oral proceedings statement brief on October 24, 2011.

(6) The first oral proceedings were conducted on November 14, 2011. The demandant gave the oral proceeding statement brief as of October 24, 2011, and referred to Evidences A No. 12, No. 13, No. 14 and No. 19 submitted as means of proof. The demandee gave the oral proceeding statement brief as of October 24, 2011.

(7) The demandant submitted a Written statement on November 24, 2011. The demandee submitted a Written statement on November 24, 2011 and an addition to Evidence B No. 1.

(8) In light of the above, the decision, "The correction shall be approved. The demand for trial of the case was groundless. The costs in connection with the trial shall be borne by the demandant" (herein after referred to as "the first trial decision") was made on December 21, 2011. The demandant brought an action for revocation of the trial decision, and the case was reviewed at the Intellectual Property High Court as 2012 (Gyo-Ke) 10038. A judgment was made to revoke the first trial decision as of December 11, 2012.

(9) Against the above decision, the demandee petitioned for acceptance of final appeal to the Supreme Court (2012 (Gyo-No) 10083) and filed a final appeal (2012 (Gyo-Sa) 10060). However, the demandee submitted a written withdrawal of the petition for acceptance of final appeal and filing of the final appeal on January 30, 2013. The decision to revoke the first trial decision has become final and binding.

(10) The case of trial regarding the invalidation of the patent was remanded. The demandee submitted a Written statement on February 19, 2013.

2. Outline of the demandant's allegation

The demandant demands the decision, "The patent regarding the inventions described in Claims 1, 2, and 7 (hereinafter referred to as "Patent invention 1," "Patent invention 2," and "Patent invention 3") of the scope of claims of the patent No. 2851237 shall be invalidated. The costs in connection with the trial shall be borne by the demandee," and alleges the reasons therefor roughly as the following A) to C).

A) The Patent inventions 1 to 3 could have been easily invented by a person skilled art on the basis of the invention described in Evidence A No. 4, the invention described in Evidence A No. 1-3, Evidence A No. 2-3, or Evidence A No. 3-3, the invention described in Evidence A No. 5, and well-known technical matters. The demandee should not be granted a patent for the inventions in accordance with the provisions of Article 29-2 of the Patent Act (see Written demand for trial after correction p. 3 l. 2-10).

B) Since the Correction of the case does not fall under any of the purposes (Article 134-2 (1) (i)-(iii)), 1) the restriction of the scope of claims, 2) the correction of errors, and 3) the clarification of an ambiguous description, the Correction is a violation of correction requirements and cannot be accepted (see Written refutation of the trial case p. 3 l. 22-25).

C) Even if the Correction of the case is approved, the Patent inventions after correction could have been easily invented by a person skilled in the art on the basis of the invention described in Evidence A No. 4, the invention described in Evidence A No. 1-3, Evidence A No. 2-3, or Evidence A No. 3-3, the invention described in Evidence A No. 5, and well-known technical matters. The demandee should not be granted a patent for the inventions in accordance with the provisions of Article 29-2 of the Patent Act. Therefore the Patent inventions 1 to 3 of the correction should be invalidated (see Written refutation of the trial case p. 6 l. 21-25, and Written refutation of the trial case p. 12 l. 13-p. 13 l. 31).

<Means of proof>

Evidence A No. 1-1: Notarized written statement of Douglas A Davis of April 28, 1999 and translation thereof, on California State University Oviatt Library the second stage project specifications, for proving that Evidence A No. 1-3 is a publication

Evidence A No. 1-2: Notice to CONTRACTOR attached to the above written statement for proving that the Evidence A No. 1-3 is a publication, and translation thereof

Evidence A No. 1-3: Project specifications attached to the written statement, which is a publication distributed before the application for the Patent invention was filed, and translated abstract

Evidence A No. 2-1: Notarized written statement of Jack E Bruce of April 29, 1999 and translation thereof, on California State University Oviatt Library the second stage project specifications, for proving that Evidence A No. 2-3 is a publication

Evidence A No. 2-3: Project specifications attached to the written statement, which is a publication distributed before the application for the Patent invention was filed

Evidence A No. 3-1: Notarized written statement of Kanis A Rogerson of April 26, 1999 and translation thereof, on California State University Oviatt Library the second stage project specifications, for proving that Evidence A No. 3-3 is a publication

Evidence A No. 3-2: Notice to CONTRACTOR attached to the above written statement for proving that the Evidence A No. 3-3 is a publication

Evidence A No. 3-3: Project specifications attached to the written statement, which is a publication distributed before the application for the Patent invention was filed

Evidence A No. 4: Japanese Unexamined Patent Application Publication No. H05-151233

Evidence A No. 5: Japanese Unexamined Patent Application Publication No. S49-080780

Evidence A No. 6: Japanese Unexamined Patent Application Publication No. S50-008270

Evidence A No. 7: Japanese Unexamined Patent Application Publication No. S49-134075

Evidence A No. 8: Japanese Unexamined Patent Application Publication No. S57-072503

Evidence A No. 9: Japanese Unexamined Patent Application Publication No. S56-056402

Evidence A No. 10: Microfilm of Japanese Utility Model Application No. S47-112063 (Japanese Unexamined Utility Model Application Publication No. S49-067379)

Evidence A No. 11: CD-ROM of Japanese Utility Model Application No. H03-045857 (Japanese Unexamined Utility Model Application Publication No. H05-019210)

Evidence A No. 15: Cover, table of contents, a copy of literature published in p. 13 to p. 22 in LIBRARY HI TEC, Consecutive Issue 20; Vol. 5, No. 4 Winter, 1978, and translated abstract

Evidence A No. 16: Japanese Unexamined Patent Application Publication No. H03-264396

Evidence A No. 17: Microfilm of Japanese Utility Model Application No. S63-150289 (Japanese Unexamined Utility Model Application Publication No. H02-072225)

Evidence A No. 18: Japanese Unexamined Patent Application Publication No. H02-070603

Evidence A No. 20: Japanese Unexamined Patent Application Publication No. S59-182103

Evidence A No. 21: Japanese Unexamined Patent Application Publication No. H04-256607

Evidence A No. 22: Japanese Unexamined Utility Model Application Publication No. H01-162410 (Note by the body: it is admitted as a clerical error for "Microfilm of Japanese Utility Model Application No. S63-58087 (Japanese Unexamined Utility Model Application Publication No. H01-162410"))

Evidence A No. 23: Japanese Utility Model Publication No. S54-001750

Evidence A No. 24: Japanese Utility Model Publication No. S54-001751

Evidence A No. 25: Japanese Unexamined Patent Application Publication No. S54-007741

Evidence A No. 26: Japanese Unexamined Patent Application Publication No. S54-007742

Evidence A No. 27: Japanese Unexamined Patent Application Publication No. S56-149904

Evidence A No. 28: Japanese Unexamined Patent Application Publication No. S59-172306

Evidence A No. 29: Japanese Unexamined Utility Model Application Publication No. S60-072405 (Note by the body: it is admitted as a clerical error for "Microfilm of Japanese Utility Model Application No. S58-161944 (Japanese Unexamined Utility Model Application Publication No. S60-072405"))

<Reference Materials>

FIG. 1 attached to the Written refutation of the trial case: Figure showing that the "widths and heights" of shelf areas are classified by size of book (Written refutation of the trial case p. 20 l. 19-l. 20)

FIG. 2 attached to the Written refutation of the trial case: Figure showing that storage efficiency of books may not be improved, depending on how the books are stored in a container, even when containers are classified by size of book (Written refutation of the trial case p. 20 l. 20-l. 22)

Evidence A No. 12: Japanese Patent Publication No. 2532820 (trial decision invalidating the patent has become final)

Evidence A No. 13: Trial decision regarding the Invalidation No. 2005-80272 (trial decision of invalidation of Patent No. 2532820) for proving that Evidences A No. 1-3, No. 2-3, and No. 3-3 are publications

Evidence A No. 14: Court decision of 2006 (Gyo-Ke) 10546 (decision upholding litigation rescinding a trial decision of invalidation of Patent No. 2532820) for proving that Evidences A No. 1-3, No. 2-3, and No. 3-3 are publications

Evidence A No. 19: Court decision of 2010 (Gyo-Ke) 10280 (decision admitting insufficiency of correction requirements)

Evidence A No. 2-2 is a missing number.

3. Outline of the demandee's allegation

The demandee submitted Written demand for correction and argues roughly as follows A) and B) against 2. Outline of the demandant's allegation B).

A) The object of the correction of the case is restriction of the scope of claims, and satisfies the correction requirements (see Oral proceeding statement brief submitted by the demandee p. 21 l. 2-l. 14)

B) It is not known whether Evidence A No. 1-3, No. 2-3, or No. 3-3 is a publication distributed before the filing date (April 20, 1994) of the Patent application (see Written reply p. 2 l. 26-l. 29), and it cannot be said that Patent inventions 1 to 3 after correction could have been easily invented by a person skilled in the art on the basis of the invention described in Evidence A No. 4, the invention described in Evidence A No. 1-3, No. 2-3, of No. 3-3, and the invention described in Evidence A No. 5 (see Written reply p. 24 l. 8- l. 15 and p. 25 l. 21-l. 25).

<Means of proof>

Evidence B No. 1: Better Storage No. 122, 1993 "KINMIRAI NO TOSHOKAN(Libraries of near future)"

Evidence B No. 2: Images (captured by the demandee)

4. Regarding the correction

4-1. Content of the demand for correction

The correction demanded by the demandee with the Written demand for correction of May 16, 2011 is to correct the following contents a) described in Claims 1, 2, and 7 of the scope of claims of the Patent invention to the following contents b) (Hereinafter referred to as "the Matters of correction." Underlines are added by the body to indicate sections that are to be corrected.)

a) "[Claim 1] A book storing and managing device including:

a storeroom having a plurality of shelf areas classified by size of book;

a plurality of containers for storing a plurality of books, which are to be housed in each of the shelf areas of the storeroom, each having a size corresponding to a shelf area where each of the containers is stored;

storage means storing storage locations of the containers in the storeroom and book codes of the books stored in the containers;

conveyance means which takes out a container storing a desired book from the storeroom, upon receipt of a book code of the book to be taken out, on the basis of the information stored in the storage means, to be conveyed to a station, and takes out an available container from the storeroom from among the containers corresponding to the size of a return book, upon receipt of size information of the book to be returned, to be conveyed to the station;

and update means of updating the information stored in the storage means, for the container conveyed to the station by the conveyance means, from which the desired book has been taken out or the container to which the return book has been returned,

the shelf areas in the storeroom storing the containers in a depth direction to a frontage for taking out the container by the conveyance means,

the conveyance means including transfer means for taking out a container behind

after taking out a front container with respect to the frontage for taking out the containers.

[Claim 2] The book storing and managing device described in Claim 1, configured so that the transfer means includes a take-out mechanism for taking out the front container from the shelf area and a moving mechanism for moving the container behind to the front, and that the container behind moved to the front by the moving mechanism is taken out by the take-out mechanism from the shelf area.

[Claim 7] The book storing and managing device described in Claim 1, configured so that the transfer means includes first and second take-out means for selectively taking out and holding the front container and the container behind, and that the container behind is taken out by the second take-out means to be conveyed to the station, with the front container taken out and held by the first take-out means."

b) "[Claim 1] A book storing and managing device including:

a storeroom having a plurality of shelf areas different in width and height classified by size of book;

a plurality of containers for storing a plurality of books, which are to be housed in each of the shelf areas of the storeroom, each having a size corresponding to a shelf area where each of the containers is stored;

storage means storing storage locations of the containers in the storeroom and book codes of the books stored in the containers, in association with each other;

conveyance means which takes out a container storing a desired book from the storeroom, upon receipt of a book code of the book to be taken out, on the basis of the information stored in the storage means, to be conveyed to a station, and takes out an available container from the storeroom from among the containers corresponding to the size of a return book, upon receipt of size information of the book to be returned, to be conveyed to the station;

and update means of updating the information stored in the storage means, for the container conveyed to the station by the conveyance means, from which the desired book has been taken out or the container to which the return book has been returned,

the shelf areas in the storeroom storing the containers in a depth direction to a frontage for taking out the container by the conveyance means,

the conveyance means including transfer means for taking out a container behind after taking out a front container with respect to the frontage for taking out the containers.

[Claim 2] The book storing and managing device described in Claim 1, configured so that the transfer means includes a take-out mechanism for taking out the front container from the shelf area and a moving mechanism for moving the container behind to the front, and that the container behind moved to the front by the moving mechanism is taken out by the take-out mechanism from the shelf area.

[Claim 7] The book storing and managing device described in Claim 1, configured so that the transfer means includes first and second take-out means for selectively taking out and holding the front container and the container behind, and that the container behind is taken out by the second take-out means to be conveyed to the station, with the front container taken out and held by the first take-out means." (Hereinafter referred to as "the matters of correction." The underline indicates that the correction was added by the body.)

4-2. Propriety of the correction

(1) Purpose of Correction

(1-1) Outline of the demandant's allegation

The demandant argues as follows roughly in the Written refutation of the trial case p. 3 l. 27-p. 6 l. 18 about the statement that since the Correction of the case does not fall under any of the purposes (Article 134-2 (1) (i)-(iii)), 1) restriction of the scope of claims, 2) correction of errors, and 3) clarification of an ambiguous description, the Correction is a violation of correction requirements and cannot be accepted.

A) The "storeroom having a plurality of shelf areas different in width and height classified by size of book" in Claim 1 of the scope of claims after correction and the "storeroom having a plurality of shelf areas classified by size of book" in Claim 1 before correction are substantially not different from each other, and the matters to be specified by the "shelf areas classified by size of book" are never restricted only by being "different in width and height." It cannot be said that the correction of Claim 1 of the scope of claims aims for

restriction of the scope of claims.

B) No error is recognized in the description in Claim 1 of the scope of claims before correction, "a storeroom having a plurality of shelf areas classified by size of book." The correction of Claim 1 of the cope of claims does not aim for correction of errors.

C) The description in Claim 1 of the scope of claims before correction, "a storeroom having a plurality of shelf areas classified by size of book," is semantically clear, and is not ambiguous due to illegitimacy to be caused by a relation with the specification, the scope of claims, or other descriptions in the drawings. The correction of Claim 1 of the scope of claims does not aim for clarification of an ambiguous description.

(1-2) Outline of the demandee's allegation

The demandee argues as follows roughly in the Oral proceedings statement brief p. 21 l. 2-l. 14 submitted by the demandee about the statement that the object of the Correction of the case is restriction of the scope of claims, and satisfies the correction requirements.

A) The correction from the description "a plurality of shelf areas" to the description "a plurality of shelf areas different in width and height" limits to shelf areas" different in width and height." There is no doubt that the correction falls under the restriction.

(1-3) Judgment by the body

The correction from the description "a storeroom having a plurality of shelf areas classified by size of book" in Claim 1 of the scope of claims of the Patent to the description "a storeroom having a plurality of shelf areas different in width and height classified by size of book" defines "a plurality of shelf areas" as "a plurality of shelf areas different in width and height."

The correction limits the shelves in the shelf areas to have different lengths in two directions, "width" and "height." It can be said that the correction, "different in width and height," aims for the restriction of the scope of claims.

(2) Addition of new matters and enlargement or alternation of the scope of claims

The matters of correction are based on: the description in [0041] of the Specification, "Thus, for example, a bookshelf 11a is, as shown in FIG. 11, sequentially classified into, from the side close to discharging and receiving rack stations 14, 29, along a traveling direction of a stacker mast 13a of a stacker crane 13, a shelf area 11A4 where a container 12 storing a book 30 in A4 format is housed, a shelf area 11B5 where a container 12 storing a book 30 in B5 format is housed, and a shelf area 11A5 where a container 12 storing a book 30 in a format equal to or smaller than A5 is housed. Other bookshelves 11b to 11f are also classified, as with the shelf areas 11A4, 11B5, and 11A5"; the description in [0042] of the Specification, "As shown in FIG. 12, when a length, width, and height of the container 12 are specified as L, W, and H, respectively, the container 12 storing the book 30 in A4 format has L=600 mm, W=509 mm, and H=313 mm,

the container 12 storing the book 30 in A5 format has

L=600 mm, W=453 mm, and H=277 mm, and the container 12 storing the book 30 in a format equal to or smaller than A5 has

L=600 mm, W=385 mm, and H=230 mm"; and the drawing [FIG. 11].

Thus, the matters of correction are technical matters derived by summing up all the descriptions in the Specification or drawings, and do not introduce a new technical matter. The matters of correction are within the scope of the matters described in the Specification or drawings, and do not substantially enlarge or alter the scope of claims.

(3) Summary

The Correction of the case falls under the provisions of Article 134-2 of the Patent Act before revision by the Act No. 116 of 1994, of which the provisions then in force shall remain applicable, and falls under the provisions of Article 126-2 of the Patent Act before revision which is applied mutatis mutandis pursuant to Article 134-2(5) of the Patent Act. The Correction of the case shall be approved as a legal correction.

5. Corrected invention 1 of the case, Corrected invention 2 of the case, and Corrected invention 3 of the case

Since the scope of claims was corrected by the Correction of the case, it is recognized that the inventions relating to Claims 1 to 7 are specified by the matters described in Claims 1 to 7 of the scope of claims, in light of the substitute specification, substitute scope of claims, and the drawings. The inventions relating to Claims 1, 2, and 7 (hereinafter referred to as "Corrected invention 1 of the case, Corrected invention 2 of the case, and Corrected invention 3 of the case ") are described in the above 4-1. b.

6. Regarding the reason for invalidation

The Correction of the case is legitimate. As for the Outline of the demandant's allegation C), we will discuss whether the Corrected inventions 1 to 3 of the case could have been easily invented by a person skilled in the art on the basis of the invention described in Evidence A No. 4, the invention described in Evidence A No. 1-3, 2-3, or 3-3, the invention described in Evidence A No. 5, and well-known technical matters.

6-1. Described matters in Evidence A

(1) Evidences A Nos. 1-1 to 1-3

(1-1) Evidence A No. 1-1 is a notarized written statement of Douglas A Davis, who was a manager of the library project. The written statement describes that every member of the general public could obtain a copy of the project specifications (Evidence A No. 1-3) as of March 22, 1989.

(1-2) Evidence A No. 1-2 (or Evidence A No. 3-2) is a notice to CONTRACTOR attached to the above written statement, from a manager in California State University. The notice describes that the project specifications can be obtained at California State University, Northridge after a predetermined deposit is paid, after March 22, 1989, and the deposit is returned when the specifications are returned in good condition.

(1-3) Evidence A No. 1-3 (Evidence A No. 2-3 and Evidence A No. 3-3 have the same contents) describes the title "Project Specifications California State University Oviatt Library the second stage" (translated abstract P. 1) and the following matters (Note by the body: Translated abstract is used for the matters described).

After the title "Library equipment-automated storage and retrieval system (ASRS)" (Translated abstract p. 4 l. 2),

A) In the chapter "Part 1 General" (Translated abstract p. 4 l. 3),

the item "1. 01 Contents of application" (Translated abstract p. 4 l. 5) includes the following descriptions.

"A. Included application

A device supplier must supply all required engineering service, labor, materials, and devices for designing, manufacturing, and installing an automated storage and retrieval system (AS/RS) including

1. 6 mini load stacker cranes, while a stacker crane (...Omitted...) must include a container insertion/drawing mechanism, (...Omitted...)

2. a shelf structure having 6 passages including storage positions of 13,260 containers in total, (...Omitted...)

5. a container including a partition, container address, and sector label, (...Omitted...)

7. 6 AS/RS end-of-aisle workstations, (...Omitted...)

9. ASRS controller, including a computer system, a controller, peripherals, and software, for supplying an interface with inventory check control, conveyor control, and library computer system. (...Omitted...) " (Translated abstract p. 4 l. 8-p. 5 l. 17), and

"C. Definition of terms in this chapter

1. The term 'LCS' in the specifications must be always understood to mean 'Library Computer System.'

2. The term 'ASRS' in the specifications must be always understood to mean 'automated storage and retrieval system.'

3. The term 'EAWS' in the specifications must be always understood to means 'End of Aisle WorkStation.'"

(Translated abstract p. 6 l. 9-l. 18)

B) In the chapter "Part 2 Product" (Translated abstract p. 8 l. 12),

the item "2. 02 General description of ASRS system" (Translated abstract p. 11 l. 1) includes the following descriptions.

"A. Parameters of AS/RS system (...Omitted...)

6. Standard system configuration (...Omitted...)

c. The number of stages: 34 Height of the stage: depth of a container + a maximum of 1.0 inch to the bottom of the next container

7. A bottom drawing of a container of 24 inches × 48 inches (inner dimensions) is employed.

The containers required are as follows.

Size of container	Quantity
24 inches/W × 48 inches/L × 6.0 inches/D	390
24 inches/W × 48 inches/L × 10.0 inches/D	7020
24 inches/W × 48 inches/L × 12.0 inches/D	5070
24 inches/W × 48 inches/L × 15.0 inches/D	390
24 inches/W × 48 inches/L × 18.0 inches/D	390
Total	13260

(...Omitted...)

10. Standard material to be stored in the system: Library materials, such as books, magazines, printed matters (...Omitted...)

(...Omitted...)

12. The number of parts to be stored

Form	Total quantity	Quantity/Container	Height of container
1. Books and magazines	950,000	96	10 inches
		64	12 inches
		64	15 inches
(...Omitted...)			
3. Children's books	8,115	140	12 and 15 inches
4. Texts	17,095	60	12 inches

(...Omitted...) " (Translated abstract p. 11 l. 2-p. 12 l. 22)

"B. Material flow (...Omitted...)

1. (...Omitted...) A request for an AS/RS item is issued to the Library Computer System (LCS), and an order request input procedure is started in one of six AS/RS workstations.

2. An operator of the workstation takes out a requested item from a container automatically retrieved, and inputs (...Omitted...) an item to be returned to ASRS when the requested item is to be stored at random. (...Omitted...)

3. When a request is input, (...Omitted...) a strip including a bar-code number (...Omitted...) of an item (...Omitted...) is created. The operator puts the taken-out item in a container on an ETV delivery car and dispatches the delivery car to any of various destinations in the library.

4. Items can be transferred between LCS and ASRS in addition to ordinary request and return operations. (...Omitted...)

5. ASRS items to be returned to the library in a circulation area are stored by category of size (random storage item, for example) (...Omitted...) in advance manually onto a shelf-mounting wagon so as to be returned to AS/RS workstations. When a request is input, (...Omitted...) the items are returned to AS/RS storage containers." (Translated abstract p. 13 l. 4-p. 14 l. 8),

"C. Identification of AS/RS items (...Omitted...)

All items to be stored in AS/RS use the following identification means for various levels. (...Omitted...)

b. Bar-code number

A bar-code number is a key field of 14-digit numbers as follows.

3 0700 1014742 0

(Note by the body: "3" is a "label type (always "3" for items)." "0700" is a "library identification number (...Omitted...)." "1014742" is a "serial number." "0" is a "Modulus 10 complementary check digit.")

1. The bar-code number is used in both the LCS system and the ASRS system for uniquely identifying each item. A label of the bar-code number is positioned on an inner cover of an item (...Omitted...) .

c. Size/aisle code

A size code or an aisle code is marked at an upper end of each item. A random storage item has a size code (for example, A, B, or C), while a constant location item has an aisle code (...Omitted...) . The size/aisle code is used for manually sorting library materials in advance before returning to AS/RS for storage.

d. The last two digits of bar-code

In addition to the size code or the aisle code, the last two digits of an item bar-code are marked at the upper end of each item. The two digits are provided for an ASRS operator to easily make an order to take out a material from a container." (Translated abstract p. 14 l. 23-p. 17 l. 6), and

"D. Definition of full container and full sector (...Omitted...)

2. Sector is the lowermost storage layer. Container is a storage layer next higher than that. A container includes multiple sectors, for example.

3. The sector has one of "full" state, "non-full" state, and "vacant" state.

4. When an operator declares that a sector is full through a keyboard to the system, ASRS determines that the sector is "full." In random location storage, ASRS allocates return items to sectors in "non-full" state until the operator declares sector-full.

(...Omitted...)

7. When all sectors in the container are full, ASRS determines that the container is "full." According to the definition, a "partially full" container has at least one "non-full" or "vacant" sector. Sectors in the "vacant" container are all vacant.

8. In random location storage, ASRS employs the following priority rules.

a. A "non-full" sector has a higher priority than a "vacant" sector.

b. All of "non-full" sectors in the same container have the same priority.

c. A "partially full" container has a higher priority than a "vacant" container.

d. A "partially full" container with a smaller quantity of "vacant" sectors has a higher priority than a "partially full" container with a larger quantity of "vacant" sectors.

e. "Partially full" containers having the same quantity of "vacant" sectors have the same priority.

9. When a requested item is taken out from a sector, even if "full" state is declared before the requested item is taken out, at any time, the system allows an alternative random storage item to enter the sector." (Translated abstract p. 17 l. 7-p. 18 l. 19)

C) The item "2. 03 Specifications of software" (Translated abstract p. 18 l. 23) includes the following descriptions.

"A. Jurisdictional scope of the control system (...Omitted...)

2. Functional overview diagram

The diagram CSUN-1 shown on p. 15 (Note: the translation p. 20) illustrates a functional overview of ASRS and a desired system configuration on LCS." (Translated abstract p. 18 l. 24-p. 19 l.8)

"B. Software (...Omitted...)

1. This chapter describes functional specifications for AS/RS control system (ASRS). ASRS is a dedicated computer system. (...Omitted...) The functions thereof are operation controls in six AS/RS workstations: request to write an order, return of an item, transfer of an item, inventory check, and security. The system interfaces with the Library Computer System (LCS)." (Translated abstract p. 22 l. 16-l. 25)

"C. Request procedure (...Omitted...)

1. (...Omitted...) A user using On-Line Public Access Catalog (OLPAC) can request an item having a location in ASRS for loan-out. All ASRS item requests are generated through LCS, excluding a non-LCS item to be requested through an ASRS terminal. LCS confirms a request of a user with an inputted ID number of a borrower. (...Omitted...) After the confirmation process, an item request transaction is transmitted to ASRS via an interface.

2. Order input procedure (...Omitted...)

a. Response of AS/RS to the LCS request

When one of the AS/RS receives the confirmed item request transaction of the user via the interface, the AS/RS automatically starts retrieving a container with the requested item. (...Omitted...)

3. Delivery of the requested item (...Omitted...)

a. In an End-of-Aisle WorkStation (EAWS), the container including one or more requested items is delivered. (...Omitted...)

4. Selection of the requested item (...Omitted...)

a. An EAWS operator takes the item out of the container with the last two digits of an item number (marked at an upper end of each item) for identifying the item." (Translated abstract p. 23 l. 9-p. 25 l. 17), and

"D. Material return procedures (...Omitted...)

1. Scanning a return item in EAWS (...Omitted...)

a. Return to AS/RS is started by optically scanning an item. (...Omitted...) Items to be randomly stored are classified by size group (A, B, and C, for example). (...Omitted...) The size group is indicated at an upper end of an item together with the last two digits of an item number. (...Omitted...)

b. Transmission of the item return transaction to LCS through the interface is started with the scanning like the above. (...Omitted...)

3. Allocation of random location (...Omitted...)

a. At the start of transmitting the item return transaction via the interface, an item with proper size group currently stored at random in a container in EAWS is automatically allocated to a container sector from which an item has been just taken out, by the same scanning (No. 2 03. D. Chapter 1). (...Omitted...)

c. After the operator inserts the item, ASRS prompts the operator to return the container to a storage location thereof. (...Omitted...)

e. As an option for the operator, when the container is delivered, the operator may return the item to AS/RS without taking out the item. In this case, a container having an available space (non-full) is retrieved by use of the priority described in No. 2 02. Chapter D." (Translated abstract p. 28 l. 2-p. 29 l. 27)

D) Following the original p. 58 in Evidence A No. 1-3, "California State University, Northridge AS/RS-Oviatt Library typical End-of-Aisle WorkStation" is shown in drawings.

(2) Evidence A No. 2-1 is a notarized written statement of Jack E Bruce, who is a Los Angeles regional manager of the California Building Department (formerly Building Office). The written statement describes that the project specifications (Evidence A No. 2-3) had a stamp of the Building Department on August 25, 1988, that the date is indicated by the stamp at a bottom right corner in the specifications p. 2, and that the specifications were publicly known at the time of submission to the Building Department, in accordance with Chapter 24, Section 1, Article 8 4-350 of the California Code of Regulations.

(3) Evidence A No. 3-1 is a notarized written statement of Kanis A Rogerson, who is a vice-president of LEO A DALY, which is an engineering company having prepared the project specifications (Evidence A No. 3-3). The written statement describes that the specifications could be obtained by interested bidders on March 22, 1989, and that the bidders have no duty to keep information confidential.

(4) Evidence A No. 4 (Japanese Unexamined Patent Application Publication No. H05-151233) is a publication distributed before the application, and describes the following matters with the drawings on "BOOK IN/OUT MANAGING DEVICE."

A) "[0001]

[Field of Industrial Application] This invention relates to a book in/out managing device configured to easily manage lending/returning of a large number of books in a large-scale library, for example." ([0001])

B) "[0003] As described in Japanese Patent Publication No. S61-4723, a system for storing each of books in a case of a standardized size, housing a plurality of cases in a container, and automatically discharging and receiving each container has been invented. Each of the books is automatically taken out or put into a case for return, thereby facilitating handling and location management, and protecting the book during delivery. A bar-code is attached to each of the cases, and information on which case is housed in which container is stored for all cases.

[0004] In response to a request to take out a book, a container housing a case storing the book is automatically discharged from a storeroom, and the case storing the desired book is automatically discharged from the container. A librarian takes out the book from the case automatically discharged, and passes it to a user, for lending the book.

[0005] In returning a book, a librarian puts a book to be returned, into the former case, which is automatically received into an arbitrary available container. When the container enters the storeroom, bar-codes of all the cases housed in the container are read, and information indicating locations of the cases are updated, for returning the book.

[0006] However, in the above book in/out managing system, books correspond one-to-one

with cases. Every time a book is returned, a case for storing the book is retrieved from among a large number of vacant cases, resulting in inefficient operation. Books are lent out internally (the book is returned on the date of lending) or lent out externally (the book is returned on a later date). The number of vacant cases is increased as the number of books lent out is increased. Therefore, if the cases and the books have fixed correspondence, a case corresponding to the book to be returned is retrieved from a large number of cases for return, thereby reducing work efficiency, and there is a need to always prepare a large number of vacant cases near a counter." ([0003]-[0006])

C) "[0008]

[Problem to be solved by the invention] As described above, the conventional book in/out managing system needs to hold correspondence between books and cases, and effects of automation cannot be fully utilized.

[0009] This invention was invented in consideration of the above matters, and aims for providing an excellent book in/out managing device configured to store a book to be returned in an arbitrary case and housed in a storeroom, without fixing the correspondence between books and cases, and to facilitate check-out/return operation.

[0010]

[Means for solving the problem] The book in/out managing device relating to the invention includes: books with identification information; automatic delivery cases with identification information for storing the books; a storeroom for housing the cases; storage means which stores book information including location information for the books stored in the storeroom together with information formed by combining the identification information attached to the books with the identification information attached to the case where the books are stored; automatic delivery means which automatically retrieves a case housing a book to be discharged from the storeroom, on the basis of the information stored in the storage means, and discharges it; generation means which reads identification information attached to a book to be stored in the storeroom and the identification information attached to an arbitrary case which can store the book, to generate new book information for the book; and automatic receiving means which automatically receives the case storing the book to be stored in the storeroom, into the storeroom, on the basis of the book information

generated by the generation means." ([0008]-[0010])

D) "[0012]

[Examples] (...Omitted...) FIG. 1 illustrates an overall configuration of the book in/out managing device described in this example. Reference numeral 11 in the figure indicates a bookshelf installed in the storeroom on the third floor of the library, for example, and housing a plurality of containers 12, 12, ... Each of the containers 12, 12, ... contains a plurality of cases 13, 13, ... Each of the cases 13, 13, ... includes one book. The cases 13, 13, ... are based on a certain standardized size. The cases have multiple kinds of thickness in accordance with a thickness of a book to be stored, with respect to the standard size.

[0013] A stacker crane 15 which is guided by a rail 14 is arranged at the front of the bookshelf 11. The stacker crane 15 takes out a container 12 from the bookshelf 11 for delivering a book, to be transferred to a delivery rack station 16, and transfers a container 12 placed on the delivery rack station 16 to the original position in the bookshelf 11, for storage. The stacker crane 15 takes out a container 12 from the bookshelf 11 for storing a book, to be transferred to a receiving rack station 17, and transfers a container 12 placed on the receiving rack station 17 to the original position in the bookshelf 11, for storage.

[0014] An endless conveyance rail 18 is arranged along the delivery and receiving rack stations 16, 17. On the conveyance rail 18, picking devices 19, 19 ... are supported so as to move freely. The picking devices 19, 19... perform an operation of taking a desired case 13 out of the container 12 arranged on the delivery rack station 16, and moving it onto the conveyance rail 18, to be transferred to one of a 2nd-floor outlet 20 and a 1st-floor outlet 21, and an operation of storing a case 13 conveyed to one of a 2nd-floor inlet 22 and a 1st-floor inlet 23 into a free space in a container 12 placed on the receiving rack station 17." ([0012]-[0014])

E) "[0016] The case 13 is transferred to the 1st-floor outlet 21 conveyed to a case inlet 28 arranged on the first floor of the library via a vertical conveyor (not shown), and transferred to a counter station 30 or a 1st-floor station 31 via a conveyor 29. At the counter station 30, a librarian takes a book out of the case 13 to be lent out to a user. At the 1st-floor station 31, a librarian takes a book out of the case 13 to be provided to a user for browsing. The

vacant cases 13 are kept in the counter station 30 and the 1st-floor station 31.

[0017] The books returned and books browsed are stored in cases 13 by librarians at the counter station 30 and the 1st-floor station 31, transferred to a case outlet 32 via the conveyor 29, and transferred to the 1st-floor inlet 23 located on the third floor via the vertical conveyor (not shown), to be returned to the bookshelf 11 in a process opposite to the delivery process.

[0018] FIG. 2 illustrates how a case 13 is taken out from a container 12 conveyed to the delivery rack station 16 to the picking device 19. The container 12 is formed in a substantially box shape with front and top faces opened, and vertically contains a plurality of cases 13, 13, ... each storing a book 33. As shown in FIG. 3, each of the cases 13, 13, ... is formed in a substantially box shape with a top face opened, so as to completely cover the book 33. Each of the cases 13, 13, ... and each book 33 have bar-codes 34, 35, respectively. (...Omitted...) " ([0016]-[0018])

F) "[0020] FIG. 4 illustrates a control system of the book in/out managing system shown in FIG. 1. The symbol 39 indicates a central processing unit and contains a microprocessor, for example. A hard disk 47 (...Omitted...) storing book information is connected, via a bus line 40, (...Omitted...) through a file adapter 46, to the central processing unit 39.

[0021] (...Omitted...) A general control board 51 (...Omitted...) is also connected to the central processing unit 39. The general control board 51 generally controls operations of ... the stacker crane 15, the picking device 19, the vertical conveyor, and the conveyors 25, 29." ([0020]-[0021])

G) "[0026] Operation of the book in/out managing system with the above configuration is described as follows. FIG. 6 is a flowchart of a lending operation of a book 33. When a book 33 is lent out, a user begins with telling a librarian at the counter station 30 about the desired book 33 (step S1). The librarian at the counter station 30 operates a console 54 to input a code of the requested book 33 (step S2).

[0027] In response to the input of the code of the requested book 33, the central processing unit 39 determines whether the requested book 33 is present in the bookshelf 11, or whether

the book is checked out, on the basis of the book information stored in the hard disk 47, and displays a result on a display 55 (step S3). (...Omitted...)

[0028] (...Omitted...) When the requested book 33 is present in the bookshelf 11 (YES), the central processing unit 39 issues a delivery command to the general control board 51 to take out the requested book 33 from the bookshelf 11 (step S5). The general control board 51 actuates (...Omitted...) the stacker crane 15, the picking device 19, the vertical conveyor 65, and the conveyors 25, 29. The desired book 33 stored in a case 13 is delivered from the bookshelf 11 to the counter station 30 (step S6), to be received by the librarian through an inlet arranged in the counter station 30.

[0029] The librarian at the counter station 30 uses a bar-code reader 56 to read a bar-code 34 attached to the case 13 delivered (step S7). The central processing unit 39 determines whether the read bar-code 34 corresponds to the code of the requested book 33 (step S8). (...Omitted...)

[0030] (...Omitted...) When the read bar-code 34 corresponds to the code of the requested book 33 (YES), the librarian uses the bar-code reader 56 to read a bar-code on a user card of the user (step S11), and takes the book 33 out of the case 13 to read the bar-code 35 on the book 33 with the bar-code reader 56 (step S12). The central processing unit 39 registers bar-code data of the user card and data on the bar-code 35 of the book 33 to be lent out, on a book check-out list storage area set in the hard disk 47 (step S13), and deletes the book information, such as a location or a correspondence code between the case 13 and the book 33, stored in the hard disk 47 for the book 33.

[0031] The librarian passes the book 33 and the user card to the user (step S14), and stores the vacant case 13 in a predetermined place (step S15). The lending operation ends (step S 16).

[0032] FIG. 7 is a flowchart of a returning operation of a book 33. When a book 33 is returned, a user begins with bringing a book 33 to be returned and a user card to the counter station 30 (step S17). A librarian at the counter station 30 receives the book 33 and the user card brought by the user (step S18), and operates the console 54 to input a code of the book 33 (step S19). In response to the input of the code, the central processing unit 39 deletes check-out registration of the book 33 from the book check-out list set in the hard disk 47.

[0033] After returning the user card to the user (step S20), the librarian selects an arbitrary

appropriate case 13 for storing the returned book 33 from a case repository (step S21), and uses the bar-code reader 56 to read a bar-code 34 on the case 13 and a bar-code 35 of the book 33. The central processing unit 39 stores/registers on the hard disk 47 a combination of data on the bar-code 34 read from the case 13 and data on the bar-code 35 read from the book 33 (step S22).

[0034] The librarian sets the case 13 storing the book 33 in an outlet arranged in the counter station 30 (step S23), and sets a location of the case 13 in the bookshelf 11, to be registered on the hard disk 24 (step S24). The central processing unit 39 issues a storage command to the general control board 51 to return the case 13 to the bookshelf 11 (step S25). The general control board 51 actuates (...Omitted...) the stacker crane 15, the picking device 19, the vertical conveyor 65, and the conveyors 25, 29. The book 33 stored in the case 13 is put into a predetermined container 12, to be stored in the bookshelf 11 (step S26). The returning operation ends (step S27)." ([0026]-[0034])

H) "[0042] FIG. 10 illustrates a book in/out managing system for 12 units of containers, which is added to the book in/out managing system of the example. The container 12 delivered from the bookshelf 74 by a stacker crane 75 is conveyed, via a delivery rack station 76, a conveyor 77, a container outlet 78, and a vertical conveyor (not shown), to a 2nd-floor station 26 via a 2nd-floor container inlet 79 and a conveyor 80, and to the counter station 30 or the 1st-floor station 31 via a 1st-floor container inlet 81 and a conveyor 82.

[0043] A container 12 located in the counter station 30 or the 1st-floor station 31 is conveyed to a 1st-floor container outlet 84 via a conveyor 83. A container 12 located in the 2nd-floor station 26 is conveyed to a 2nd-floor container outlet 86 via a conveyor 85. The container 12 conveyed to the 1st-floor container outlet 84 or the 2nd-floor container outlet 86 is transferred to a 3rd-floor container inlet 87 via the vertical conveyor (not shown), transferred to a receiving rack station 89 via a conveyor 88, and stored in the bookshelf 74 by the stacker crane 75." ([0042]-[0043])

I) In light of the descriptions in D), [FIG. 1], and [FIG. 10], it can be understood that the "storeroom" includes a bookshelf 11 and that the bookshelf 11 includes a plurality of shelf areas.

J) In light of the descriptions in D), [FIG. 1], and [FIG. 10], it can be understood that the "container 12" stores a plurality of books stored in each of areas in the storeroom, during delivery.

K) In light of the descriptions in G) and H), [FIG. 1], and [FIG. 10], the "central processing unit 39" executes control for retrieving a book to be lent out, from the storeroom, and executes control for returning a book to be returned. It can be understood that each of the "stacker crane 75, conveyor 77, conveyor 80, and conveyor 82" constituting the conveyance means retrieves a container storing a book to be lent out, from the storeroom, upon receipt of a check-out request, to be conveyed to the station, and retrieves a desired container to be conveyed to the station, upon receipt of a return request.

L) In light of the descriptions in G) and H), [FIG. 1], and [FIG. 10], the "central processing unit 39" executes control for retrieving a book to be lent out, and control for returning a book to be returned, stores and registers the bar-code 34 data read from the case 13 and the bar-code 35 data read from the book 33 upon receipt of a return request, and registers a location of the case 13 in the bookshelf 11 on the hard disk 47. It can be said that the central processing unit 39 issues a storage command to the general control board 51 to return the case 13 to the bookshelf 11, to retrieve a desired container from among a plurality of containers to be conveyed to the station.

The location of the case 13 in the bookshelf 11 indicates a storage location in the bookshelf 11, which has been stored and registered before registering the location of the case 13 in the bookshelf 11 on the hard disk 47 by reading the bar-code 35 data obtained from the book 33 together with the bar-code 34 data obtained from the case 13. The position where the container is stored has been determined by registering the bar-code 35 data read from the book 33 and the bar-code 34 data read from the case 13 in association with the location, accordingly. A container corresponding to the location is specified as a storage command, retrieved from the storeroom, and conveyed to the station. It can be seen that the bar-code 35 data read from the book 33 to be returned is input and stored/registered with the bar-code 34 data read from the case 13, and the bar-code 34 data read from the

case 13 and the location are registered in association with each other, so that a desired container is specified from among the containers as a storage command and retrieved from the storeroom, to be conveyed to the station.

M) In light of the descriptions in G) and H), [FIG. 1], and [FIG. 10], it can be seen that the system includes means of updating information stored in the hard disk by deleting the information stored in the hard disk that stores the location of the requested book 33 data on the cases and books stored in each of the containers 12, in association with each other, or additionally storing the location of the case 13 in the bookshelf 11 that stores the book to be returned, on the hard disk 47.

Thus, according to the descriptions in A) to H), and I) to M), prior arts, examples in [FIG. 1] to [FIG. 9], and description of the example in [FIG. 10], it can be recognized that Evidence A No. 4 describes the following invention (hereinafter referred to as "Invention A-4").

(Invention A-4)

"A book in/out managing device including:

a storeroom having a bookshelf 11; a plurality of containers 12 for storing a plurality of books 33 into the bookshelf 11 arranged in the storeroom together with cases 13; a hard disk 47 which stores locations in the storeroom of the books stored in the containers and data on bar-codes 35 attached to the books stored in the containers 12, together with data on the cases 13, in association with each other; means of retrieving, upon receipt of an input of a code of a book 33 to be lent out, a container 12 containing the book 33 stored in the case 13, on the basis of the information stored in the hard disk 47, from the storeroom, to be conveyed to a station (for example, 26, 30, 31 in FIG. 10) by a stacker crane 75, a conveyor 77, a conveyor 80, and a conveyor 82, retrieving, upon receipt of a return request, a desired container from among the above containers from the storeroom, to be conveyed to the station, and conveying, upon receipt of bar-code 35 data attached to the book to be returned and data on an arbitrary case 13, a container containing the book to be returned stored in the case 13 to the location in the bookshelf 11 by means of the stacker crane 75, the conveyor 77, the conveyor, 80, and the conveyor 82; and means of deleting the information stored in

the hard disk storing the location for the requested book 33 conveyed to the station by the conveying means and data on the cases and the books stored in the containers 12 in association with each other, or additionally storing the location of the case 13 storing the book to be returned in the bookshelf 11 on the hard disk 47, to update the information stored in the hard disk."

In the Written reply, the Oral proceedings statement brief submitted by the demandee, the Written statement submitted by the demandee on November 24, 2011, and the Written statement submitted by the demandee on February 19, 2013, the demandee argues about errors in the findings of Invention A-4. However, in light of the matters described in the above A) to H), the matters to be found in the above I) to M), the prior arts, and the examples in [FIG. 1] to [FIG. 9], and the matters described in the example in [FIG. 10], the Invention A-4 has been acknowledged and there is no error in the findings.

(5) Evidence A No. 5 (Japanese Unexamined Patent Application Publication No. S49-080780) is a publication distributed before the application was filed, and describes the following matters with the drawings on "LOADING PALLET CARRY-IN/OUT METHOD."

A) "In carrying out a loading pallet, as shown in FIG. 9, a telescopic fork 3 is extended and moved upward together with a stage 7. A loading pallet 1A in a front shelf space 4A is placed on the telescopic fork 3, the telescopic fork 3 is contracted, and a shelf stacking lift 2 is moved, to convey the loading pallet 1A toward a predetermined location.

The shelf stacking lift is returned to a position opposite to the front shelf space 4A. The telescopic fork 3 is extended and moved upward or downward, to engage a holding part 5 formed at a tip of the telescopic fork 3 with an engaging part 6 formed at a front part of a loading pallet 1B. As shown in FIG. 10, when the telescopic fork 3 is contracted, the loading pallet 1B is pulled forward to be placed on a pallet support 8A of the front shelf space 4A. The telescopic fork 3 is moved upward or downward, to disengage the holding part 5 of the telescopic fork 3 from the engaging part 6 of the loading pallet 1B. As shown in FIG. 11, the telescopic fork 3 is extended below the loading pallet 1B, and moved upward together with the stage 7, to place the loading pallet 1B on the telescopic fork 3.

After contracting the telescopic fork 3, the shelf stacking lift 2 is moved, to convey the loading pallet 1B toward a predetermined location." (p. 2 lower left column l. 7 to lower right column l. 10)

B) "The loading pallets 1A, 1B can be easily carried in and out with respect to the front shelf space 4A and a rear shelf space 4B in a dual shelf, thereby doubling a width of a multi-stacking shelf, while doubling the storage capacity, without increasing a distance between the multi-stacking shelves located at both sides of a lift aisle. Efficient space utilization can be achieved in a storehouse or a factory, accordingly." (p. 3 upper right column l. 5-l. 12)

(6) Evidence A No. 6 (Japanese Unexamined Patent Application Publication No. S50-008270) is a publication distributed before the application was filed, and describes the following matters with the drawings on "LOADING PALLET CARRYING OUT METHOD."

A) "In carrying out a loading pallet, as shown in FIG. 10, a telescopic fork 4 is extended and moved upward together with a stage 8. A loading pallet 1A in a front shelf space 1A is placed on the telescopic fork 4, the telescopic fork 4 is contracted, and a shelf stacking lift 3 is moved, to convey the loading pallet 2A toward a predetermined location.

The shelf stacking lift is returned to a position opposite to the front shelf space 1A. The telescopic fork 4 is extended and an end thereof is inserted into a pallet 5. A horizontal moving device 9 horizontally moves the telescopic forks 4 in separating directions. As shown in FIG. 11, holding members 6 arranged on external end surfaces of upper forks 4A are engaged with engaging members 7 arranged on inner front end surfaces of both side frames 11 of the pallet 5. As shown in FIG. 12, when the telescopic fork 4 is contracted, the loading pallet 2B is pulled forward to be placed on a pallet support 13A of the front shelf space 1A. The telescopic forks 4 are horizontally moved in an approaching direction, to disengage the holding parts 6 of the telescopic forks 4 from the engaging members 7 of the pallet 5. As shown in FIG. 13, the telescopic fork 4 is extended below the loading pallet 2B, and moved upward together with the stage 8, to place the loading pallet 2B on the telescopic fork 4. After contracting the telescopic fork 4, the shelf stacking lift 3 is moved, to convey the loading pallet 2B toward a predetermined location." (p. 2 upper right column l. 5 to lower left column l. 12)

(7) Evidence A No. 7 (Japanese Unexamined Patent Application Publication No. S49-134075) is a publication distributed before the application was filed, and describes the following matters with the drawings on "REAR LOAD UNLOADING METHOD OF STACKER CRANE WITH DOUBLE FORK."

A) "In FIG. 1, (1) is a wall of a storehouse, (2) is a rail for moving a crane. (3) is a crane and includes 2-system forks (A) and (B). (4-1), (4-2), (4-3), and (4-4) are shelves. Front loads (5) and rear loads (6) are placed on the shelves. (7) is a home position where a roller conveyor (8) is arranged to allow automatic loading/unloading. In FIG. 2, the crane is positioned to align a target shelf with a fork A to store an unnecessary front load (5) on the fork A, and the crane is moved and positioned to align the shelf with a fork B to store a target rear load (6) on the fork B. The crane is returned to the initial position to store the load on the fork A into the front part of the shelf, and the crane is moved to the origin, to pass the rear load (6)." (p. 1 lower right column l. 6-l. 20)

(8) Evidence A No. 8 (Japanese Unexamined Patent Application Publication No. S57-072503) is a publication distributed before the application, and describes the following matters with the drawings on "CONTROL METHOD OF STACKER CRANE."

A) "As shown in FIG. 3, multiple forks are arranged, and shelves are formed in a uniform shape as a unit. Two stations are allocated to each of stacker cranes. A stacker crane 3 picks a palette from a specified first shelf, and drops it into a second shelf. As shown in the figure, the forks are multi-reach forks (MRF) 5 which extend and contract for multiple pallets, and multiple forks are arranged.

FIG. 4 is an operation diagram of the multi-reach fork 5. In this example, the fork is a double-reach fork. In pick operation, the stacker crane 3 moves up to a stage and column (the stage indicates a coordinate in a direction from a floor to a ceiling, the column indicates a coordinate in a direction from PPS2 to a travel line of the stacker crane, and the row indicates a coordinate in a direction orthogonal to the travel direction of the stacker crane 3) of a predetermined shelf, and stops. Then, MRF 5 extends up to a predetermined pallet position and picks a pallet to be received in the stacker crane 3. In drop operation, the stacker crane 3 moves up to the predetermined shelf and drops the pallet in an opposite

manner. According to the above description, in any case, it is desirable that no pallet 7 with an article 6 mounted thereon exists in the front row. However, MRF 5 is provided in this invention, so that the pallet 7 in the front row can be picked in advance." (p. 3 upper left column l. 2 to upper right column l. 6)

B) Due to the restrictions of a forkmoment load, it is the most practical to employ two double-reach forks, (...Omitted...) however, in this case, one double-reach fork and one single-reach fork are employed, preferably. (p. 3 upper right column l. 8-l. 14)

C) "FIG. 5 and FIG. 6 (a), (b), (c), and (d) are operation diagrams of the stacker crane 3 and MRF 5 in discharging operation. In this example, articles A and C are discharged. A shelf-fix location system is employed where all shelves have pallets. The stacker crane 3 moves and stops so that a single-reach fork carriage 8 may be located in front of a stage and column of a shelf of the article A. The single fork 3 (Note by the body: this is recognized as an error of the single fork 4) picks a pallet 6 of an article B stored in a shelf at the front of the article A, to be received into the single-fork carriage 8. The stacker crane 3 moves and stops so that a double-reach fork carriage 9 may be located in front of a stage and column of the article A. The MRF 5 picks a pallet 6 of the article A, to be received into the double-reach fork carriage 9. The stacker crane 3 moves and stops so that the single-reach fork carriage 8 may be located in front of a stage and column of the article B. The single fork 4 returns the article B from the carriage 8 into the original shelf. The carriage 8 moves and stops so as to be located in front of a stage and column of the article C. The single fork 4 picks a pallet 6 of the article C, to be received into the carriage 8." (p. 3 upper right column l .15 to lower left column l. 16)

(9) Evidence A No. 9 (Japanese Unexamined Patent Application Publication No. S56-056402) is a publication distributed before the application was filed, and describes the following matters with the drawings on "LOADING/UNLOADING METHOD AND DEVICE WITH RESPECT TO SHELF."

A) "When there is a load 3 in the front, as shown in FIG. 1 and by Block 10 in FIG. 4, a single-reach fork 4 scoops the load 3 and stores the load 3 on the single-reach fork 4 onto

an elevator 6a, for temporary storage. As shown in FIG. 1 and FIG. 2, the stacker crane 6 is moved in a horizontal A arrow direction by one block, to align a double-reach fork 5 with a shelf block where a load 2 is stored. The double-reach fork 5 is extended and scoops the load 2 to be stored on the elevator 6a. A determination is made as to whether there is a load 3 in the front. When there is a load, the stacker crane 6 moves in a horizontal B direction by one block to align the single-reach fork 4 with the original shelf block. The single-reach fork 4 is extended to scoop the load 3 to be placed on the front shelf block, and the stacker crane 6 conveys only the load 2 to an outlet." (p. 3 upper left column l. 10 to upper right column l.6)

(10) Evidence A No. 10 (Microfilm of Japanese Utility Model Application No. S47-112063 (Japanese Unexamined Utility Model Application Publication No. S49-067379) is a publication distributed before the application was filed, and describes the following matters with the drawings on "WAREHOUSE EQUIPMENT."

A) "A delivering tool (13) is moved in/out by integer multiple of a length (1) of a placing surface of the delivery tool (13), to be adapted to loading sections (17A) (17B) configured to be twice or an integer multiple of the placing surface length (1). The delivering tool (13) can treat multiple loads (12) with respect to one sectional storage space (2). A load (12) on the loading section (17B), which has been stored earlier, can be taken out only by taking out a load (12) on the loading section (17A), which has been stored later." (p.5 l. 4-l. 12)

(11) Evidence A No. 11 (CD-ROM of Japanese Utility Model Application No. H03-045857 (Japanese Unexamined Utility Model Application Publication No. H05-019210) is a publication distributed before the application, and describes the following matters with the drawings on "2-PALLET STORAGE WAREHOUSE."

A) "[0003] When an object X located at the back of a storage shelf 4 is discharged, and an object X located in the front is to remain there, discharging operation is conducted on the assumption of the existence of a "vacant" storage shelf 4. For example, work conveyance means 3 is actuated to insert a fork part 3 thereof into a pallet of the object X (object B) located in the front, to be drawn out, and, as shown by a dashed line and an arrow in FIG. 2, the object B is transferred to the "vacant" storage shelf (vacant shelf C). The work

conveyance means 3 is actuated to draw out the object X (object A) located at the back, as shown by a solid arrow in FIG. 2, to be discharged." ([0003])

(12) Evidence A No. 15 (Cover, table of contents, a copy of literature published in p. 13 to p. 22 in LIBRARY HI TEC, Consecutive Issue 20; Vol. 5, No. 4 Winter, 1987, and translated abstract) is a publication distributed before the application was filed, and describes the following matters on "Industrial storage technology applied to the request of library."

A) "The library can specify arrangement of books in the automated storage and retrieval system, while there is no need for that, since the computer grasps locations of items. In fact, the automated storage and retrieval system requires only information on height and identification information of each of the items, for each of materials to be stored in the system." (Translated abstract p. 2 l. 8-l. 13)

(13) Evidence A No. 16 (Japanese Unexamined Patent Application Publication No. H03-264396) is a publication distributed before the application was filed, and describes the following matters with the drawings on "LENDING CONTROL APPARATUS."

A. "We will describe the operation of the lending control apparatus using FIG. 6. In lending processing of the procedure (20) in FIG. 6, a book number indicated by a bar-code (2) on the book (1) is read with a bar-code reader (3) in FIG. 7. In the procedure (21), book management data, such as (8a), corresponding to the book number are retrieved from a book management data file (8), in response to an instruction from a CPU (6) in FIG. 1. In the procedure (22), an identification code, such as '9008999' of a borrower is input from a keyboard (7). In the procedure (23), the identification code, such as '9008999,' is stored in a 'lending destination' field (8a7) of the book management data (8a). At the same time, 'date of lending' data automatically given from the system are stored in a field (8a8) and a field (8a10), and 'the cumulative number of times the borrower has borrowed books' is stored in a field (8a9).

As shown above, lending operation ends.

In search processing, in the procedure (30) in FIG. 6, a search condition is input

from the bar-code reader (3) or the keyboard (7). In the procedure (31), book management data (8a), (8b), (8c), or the like, corresponding to the search condition are retrieved from the book management data file (8)." (p. 2 lower left column l. 11 to lower right column l. 12)

(14) Evidence A No. 17 (Microfilm of Japanese Utility Model Application No. S63-150289 (Japanese Unexamined Utility Model Application Publication No. H02-072225)) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Automated book return device."

A) "FIG. 6 to FIG. 8 illustrate the 'automated book return device' for which the applicant applied for a patent on August 30, 1988. (1) is a bar-code attached at the bottom of a back cover of a book (2). The bar-code (1) serves as indicating the type on the specifications of the books (2) in A4 and A5 formats.

FIG. 6 (b) illustrates an overview of the automated book return device. (3) is a reception counter arranged at an entrance of the library, which is not soaked by rain. The reception counter (3) includes a return slot (3a) arranged at the front to receive the book (2). A notice (3b), saying that a book (2) should be inserted in the return slot (3a) with its back cover down, is fixed near the return slot (3a).

(4) is a first conveyance mechanism for horizontally conveying the book (2) received by the return slot (3a) into the library. The first conveyance mechanism (4) includes a first conveyor (41) and a second conveyor (42), and is started when a switch (not shown) arranged at the return slot (3a) is turned on by the book (2) inserted. A bar-code reading mechanism (5) is arranged between the first and second conveyors (41), (42). The bar-code reading mechanism (5) reads the bar-code (1) on the book (2) conveyed. A second conveyance mechanism, which is described below, is started. One storage box (6) corresponding to the type of the book (2) indicated by the bar-code (1), as shown in the same figure, is conveyed and arranged forward of a downstream end of the first conveyance mechanism (4), selectively. (In the figure, a storage box shown by a symbol (62) is arranged). Accordingly, the storage box (6), which is described below, stores only books (2) of the same type, in principle. The reading mechanism (5) outputs information on the bar-code (1) to an information processing apparatus (not shown), to cause a printer (not shown) connected to the information processing apparatus to confirm return of the book

lent out." (p. 2 l. 17-p. 4 l. 10)

(15) Evidence A No. 18 (Japanese Unexamined Patent Application Publication No. H02-070603) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Storage management method and device."

A) "Actually, the method of the invention is characterized by storing an object as a function of size thereof and storage capacity available in the storage.

The object is stored in "the first" available free space, in consideration of the size thereof.

According to the method, a position where the object has been stored and a position and size of available capacity are stored recorded by storage.

Therefore, information required for searching for an object in the storage or storing another object in the storage can be always available." (p. 2 lower left column l. 9-l.19)

B) "In conveying an object into the storage, a computer specifies the object, acquires data on the size thereof and full state of the storages, and retrieves various locations where the object can be stored." (p. 3 upper right column l. 10-l. 13)

C) "We will describe the method, using a library where books are stored, retrieved, and arranged, as an example, below.

Each of the books is preferably stored in a container for storage. The container is housed in a container unit. The library is composed of a set of the container units.

The position of a storage unit where a book is stored and the position of the book in the storage unit are known, and the positions of the books are known, accordingly. The positions are defined by different kinds of references, and defined by serial numbers of the books in the storage units. The serial numbers can be determined from the bottom or the front of a unit." (p. 3 lower left column l. 13 to lower right column l. 5)

D) "It is advantageous that the device includes data processing means of storing data on full state of one storage, size of an object, and position of the object in the storage, and controlling the robot and the transfer means so as to retrieve and store the object." (p. 4 lower right column l. 8-l. 12)

(16) Evidence A No. 20 (Japanese Unexamined Patent Application Publication No. S59-182103) is a publication distributed before the application was filed, and describes the following matters with the drawings on "RETRIEVING SYSTEM FOR STORAGE SHELF."

A) "2. Scope of claims

A retrieving system for storage shelf including an input device, a processor, and a plurality of shelves each having predetermined allowable capacity to be defined by weight limit and volume, and configured to store a plurality of objects different in at least one of volume and weight in the shelves, comprising means of calculating a maximum quantity of objects to be stored, which is less than the allowable capacity of the shelves, for each of multiple kinds of objects (...Omitted...) ." (p. 1 lower left column l. 4-l. 17 "Scope of claims")

(17) Evidence A No. 21 (Japanese Unexamined Patent Application Publication No. H04-256607) is a publication distributed before the application was filed, and describes the following matters with the drawings on "AUTOMATED STORAGE AND RETRIEVAL WAREHOUSE DEVICE."

A) "[0001]

[Field of Industrial Application] This invention relates to an automated storage and retrieval warehouse device having running routes for carriages with load transfer device, which can move horizontally along a shelf, arranged in multiple stages vertically, and a loading/unloading lift device arranged adjacent to the end of the running routes to transfer a load to/from the carriages on the running routes." ([0001])

B) "[0005]

[Examples] To describe one example of the invention on the basis of attached illustrative drawings, in FIG. 1 and FIG. 2, 1A and 1B are standing bookshelves arranged at an interval, each including a lower zone 3 with four stages of wide load storing blocks 2 arranged vertically, and an upper zone 5 with three stages of narrow load storing blocks 4 arranged vertically.

6A-6D are four stages of carriage running routes arranged vertically, which are set between the standing bookshelves 1A and 1B, for each of the stages of the wide load storing blocks 2 in the lower zone 3 of the standing bookshelves 1A and 1B. In each of the running routes 6A-6D, a mobile carriage 7 for carrying a wide load WL is supported via a pair of left and right guide rails 8.

9A-9C are three stages of carriage running routes arranged vertically, which are set between the standing bookshelves 1A and 1B, for each of the stages of the narrow load storing blocks 4 in the upper zone 5 of the standing bookshelves 1A and 1B. In each of the running routes 9A-9C, a mobile carriage 10 for carrying a narrow load WS is supported via a pair of left and right guide rails 11." ([0005])

C) "[0016] Furthermore, an elevator or a conveyor to be used for both wide load WL and narrow load WS can be arranged. (...Omitted...) " ([0016])

(18) Evidence A No. 22 (Microfilm of Japanese Utility Model Application No. S63-58087 (Japanese Unexamined Utility Model Application Publication No. H01-162410")) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Automated storage and retrieval system and shelf structure thereof."

A) "This device relates to an automated storage and retrieval system and shelf structure thereof, which is configured to automatically store and retrieve an object in a warehouse or the like." (p. 2 l. 2-l. 4)

B) "FIG. 11 is a front view illustrating a general configuration of the automated storage and

retrieval system. A storage area 1 includes an area 1a where wide shelves 2 are arranged, and an area 1b where narrow shelves 3 are arranged. In a front part of the storage area 1, a column 4 is arranged so as to freely move along a shelf open side of the storage area 1. The column 4 includes a support stage 5 which freely moves upward and downward. On the support stage 5, a picker (not shown) is arranged for inserting and taking out containers 6, 7 between the shelves 2 and 3. The wide shelves 2 are locations exclusively for storing corresponding wide containers 6, while the narrow shelves 3 are locations exclusively for storing corresponding narrow containers 7." (p. 2 l. 11-p. 3 l. 4)

(19) Evidence A No. 23 (Japanese Utility Model Publication No. S54-001750) is a publication distributed before the application, and describes the following matters with the drawings on "Storage container carrying mechanism in device which automatically inputs/outputs storage container to/from storage shelf."

A) "This device relates especially to a storage container carrying mechanism for drawing or inserting a storage container from/to a storage shelf, in a device (hereinafter referred to as an automated storage device) which automatically stores many storage containers housing documents, books, or mechanical components, into storage shelves, or retrieves a desired storage container from the storage shelves to a predetermined location.

It is inefficient and uneconomical that a person moves to a location of a desired article which is one of many stored articles, such as documents, books, or components, to be taken out." (p. 1 the first column l. 32 to the second column l. 7)

(20) Evidence A No. 24 (Japanese Utility Model Publication No. S54-001751) is a publication distributed before the application, and describes the following matters with the drawings on "Storage container carrying mechanism in device which automatically inputs/outputs storage container to/from storage shelf."

A) "This device relates especially to a storage container carrying mechanism for drawing or inserting a storage container from/to a storage shelf, in a device (hereinafter referred to as an automated storage device) which automatically stores many storage containers housing documents, books, or mechanical components, into storage shelves, or retrieves a desired storage container from the storage shelves to a predetermined location.

It is inefficient and uneconomical that a person moves to a location of a desired article which is one of many stored articles, such as documents, books, or components, to be taken out." (p. 1 the first column l. 35 to the second column l. 10)

(21) Evidence A No. 25 (Japanese Unexamined Patent Application Publication No. S54-007741) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Storeroom."

A) "This invention relates to an open-shelf storeroom." (p. 1 lower right column l. 4-l. 5)

B) "This book stand in/out device (13) can be made by applying an arbitrary one of various pallets or a container in/out device to be used for conventional automated warehouses." (p. 2 upper left column l. 9-l. 12)

(22) Evidence A No. 26 (Japanese Unexamined Patent Application Publication No. S54-007742) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Storage for book."

A) "This invention provides a storage suitable for an open-shelf storeroom or a storage for parts." (p. 1 lower left column l. 17-l. 18)

B) "This invention can be implemented as described above. According to the storeroom of the invention, books in the open-shelf storeroom can be automatically carried in/out, or articles in other small article storages can be automatically carried in/out. Especially, this invention is configured to directly carry an object into/from a container supported on a conveyor. No special peripheral conveyance device is required, and an inexpensive and compact configuration can be attained, while reducing carry-in/out time and improving operation efficiency." (p. 2 lower left column l. 8-l. 17)

(23) Evidence A No. 27 (Japanese Unexamined Patent Application Publication No. S56-

149904) is a publication distributed before the application was filed, and describes the following matters with the drawings on "APPARATUS FOR INDIVIDUALLY WAREHOUSING AND DELIVERING ITEM."

A) This invention relates to an automated storage for articles, such as books, to be carried in/out in a small unit, which is effective when the articles are carried in/out highly frequently.

In a conventional system, as an automated storage, containers are stored in a shelf formed in a lattice shape, and each container is carried in/out by a stacker running along the shelf." (p. 1 lower right column l. 4-l. 10)

(24) Evidence A No. 28 (Japanese Unexamined Patent Application Publication No. S59-172306) is a publication distributed before the application was filed, and describes the following matters with the drawings on "DELIVERING/STORING CRANE FOR AUTOMATIC WAREHOUSE."

A) "This invention relates to a delivering/storing crane to be used for an automatic warehouse, and provides a simple delivering/storing crane for automatic warehouse configured to safely and properly shift both cargo with small width and cargo with large width guided by a pair of left and right guides, without requiring a movable guide which changes a distance in accordance with a width of a cargo as before.

To describe one example of the invention on the basis of attached illustrative drawings, 1 is a shelf standing by a constant moving route of the delivering/storing crane for automatic warehouse, and includes a compartment 3 for storing a cargo 2 with large width and a compartment 5 for storing a cargo 4 with small width. Each of the compartments 3, 5 includes a pair of left and right cargo receiving pieces 7a, 7b arranged between a pair of front and rear supports 6, and a pair of left and right stoppers 8a, 8b attached to the rear support 6. The delivering/storing crane includes a carriage 10 supported by a support 9 so as to be moved upward/downward. On the carriage 10, cargo shifting means 11 is arranged which can be moved toward/apart from the compartments 3, 5 of the shelf 1 and freely moves upward/downward. At both sides of the moving route of the shifting means 11, there are arranged a pair of left and right lower support surfaces 12 for supporting the cargo 4 with small width, a pair of left and right upper support surfaces

13 for supporting the cargo 2 with large width at a position higher than the lower support surfaces 12, a pair of left and right lower guides 14 located between the upper and lower supporting surfaces 12, 13 and guiding both sides of the cargo 4 with small width, and a pair of left and right upper guides 15 located in a position higher than the upper support surfaces 13 and guiding both sides of the cargo 2 with large width. Since the shifting means 11 is known, a supporting structure and a driving structure are not illustrated or described. In this example, only a locking piece 16a located on the side of the shelf 1, of a pair of front and rear locking pieces 16a, 16b, is employed." (p. 1 lower left column l. 17-p. 2 upper left column l. 9)

B) FIG. 1 illustrates that the compartment 3 for storing a cargo 2 with a large width and the compartment 5 for storing a cargo 4 with a small width are different in height, as well as width, for each of the cargos.

(25) Evidence A No. 29 (Microfilm of Japanese Utility Model Application No. S58-161944 (Japanese Unexamined Utility Model Application Publication No. S60-072405)) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Platform of automatic warehouse treating containers different in width."

A) "In storing various types of components in an automatic warehouse, the components are generally stored in containers. If the components of various sizes are stored in containers of the same size, some containers are full and the others have wasted space, resulting in reducing overall spatial efficiency of the warehouse. This inconvenience can be eliminated to some extent by using two types of containers having different widths in accordance with the shape and size of the components and by dividing the storage shelf in the warehouse into a part dedicated for large containers and a part dedicated for small containers." (p. 1 the last line to p. 2 l. 9)

B) "FIG. 1 illustrates a general configuration of an automatic warehouse using a platform of this invention. A shelf device 1 includes a lot of wide storage shelves 2 and a lot of narrow storage shelves 3. A column 5 to be moved in a lateral direction 4 is arranged at the front

of the shelf device 1. The column 5 includes the platform 7 to be moved in a vertical direction 6. The platform 7 moves vertically and laterally along front surfaces of the storage shelves 2 and 3, reads a mark on the shelf device 1 or the column 5 to stop at a position corresponding to a desired storage shelf, and carries a container 8 or 9 into/out of the storage shelf. The container 8 is a wide container to be stored in the wide storage shelf 2, while the container 9 is a narrow container to be stored in the narrow storage shelf 3." (p. 4 l.10-p. 5 l. 3)

6-2. Regarding whether Evidence A No . 1-3 (Evidence A No. 2 -3 and Evidence A No. 3-3 have the same contents, and they are referred to as simply "Evidences A No. 1-3 or the like") can be accepted as a publication distributed before the application was filed

As indicated in 3. Outline of the demandee's allegation, with regard to the project specifications, such as Evidence A No. 1-3 or the like, it is not known whether Evidence A No. 1-3 or the like is a publication distributed before the filing date. We will examine this point, as below.

Evidence A No. 1-1 is a notarized written statement of Douglas A Davis, who was a manager of the library project. The written statement describes that every member of the general public could obtain a copy of the project specifications (Evidence A No. 1-3 or the like) as of March 22, 1989.

Evidence A No. 2-1 is a notarized written statement of Jack E Bruce, who is a Los Angeles regional manager of California Building Department (formerly Building Office). The written statement describes that the project specifications (Evidence A No. 2-3) had a stamp of the Building Department on August 25, 1988, the date is indicated by the stamp at a bottom right corner in the specifications p. 2, and that the specifications were publicly known at the time of submission to the Building Department, in accordance with Chapter 24, Section 1, Article 8 4-350 of the California Code of Regulations.

Evidence A No. 3-1 is a notarized written statement of Kanis A Rogerson, who is a vice-president of LEO A DALY, which is an engineering company having prepared the

project specifications (Evidence A No. 3-3). The written statement describes that the specifications could be obtained by interested bidders on March 22, 1989, and that the bidders have no duty to keep information confidential.

Evidence A No. 1-2 (or Evidence A No. 3-2, which has the same contents, is referred to as Evidence A No. 1-2) is a notice to CONTRACTOR attached to the above written statement, from a manager in California State University. The notice describes that the project specifications can be obtained at California State University, Northridge after a predetermined deposit is paid, after March 22, 1989, and the deposit is returned when the specifications are returned in good condition.

Accordingly, in light of Evidence A No. 1-1, Evidence A No. 2-1, Evidence A No. 3-1, and Evidence A No. 1-2, as for the project specifications of Evidence A No. 1-3 or the like, it can be guessed that the original thereof was disclosed publicly to be freely browsed and that a copy thereof could be issued in response to a request from the public without delay. It can be guessed that the original could be copied in response to a request from the public in this situation. Therefore, it can be said that Evidence A No. 1-3 or the like could be a publication distributed on March 22, 1989 after at least the specifications were submitted to the state building department, or before the filing date of the patent (April 20, 1994).

The same judgment was given to the same evidences in the trial decision regarding the invalidation No. 2005-80272 (see Evidence A No. 13 as a reference), and Court decision of 2006 (Gyo-Ke) 10546 (see Evidence A No. 14 as a reference).

6-3. Regarding Corrected invention 1 of the case

(1) Comparison

Comparing Corrected invention 1 of the case with Invention A-4,

it can be said that, in light of the function and technical significance thereof, the terms in Invention A-4, "location," "bar-code 35 attached to the book," "hard disk 47," "lent-out," and "book in/out managing device" correspond to the terms in Corrected invention 1 of the case, "storage location," "book code," "storage means," "take out," and

"book storing and managing device," respectively.

The description in Invention A-4, "a hard disk 47 which stores locations in the storeroom of the books stored in the containers and data on bar-codes 35 attached to the books stored in the containers 12, together with data on the cases 13, in association with each other" corresponds, only in the case of "the storage means storing storage locations in the storeroom and book codes of the books stored in the containers, in association with each other," to the description in Corrected invention 1 of the case, "storage means storing storage locations of the containers in the storeroom and book codes of the books stored in the containers, in association with each other."

The description in Invention A-4, "retrieving, upon receipt of an input of a code of a book 33 to be lent out, a container 12 containing the book 33 stored in the case 13, on the basis of the information stored in the hard disk 47, from the storeroom, to be conveyed to a station (for example, 26, 30, 31 in FIG. 10) by a stacker crane 75, a conveyor 77, a conveyor 80, and a conveyor 82" corresponds, only in the case of "taking out a container storing a desired book from the storeroom, upon receipt of a book code of the book to be taken out, on the basis of the information stored in the storage means, to be conveyed to a station," to the description in Corrected invention 1 of the case, "takes out a container storing a desired book from the storeroom, upon receipt of a book code of the book to be taken out, on the basis of the information stored in the storage means, to be conveyed to a station."

Likewise, the description in Invention A-4, "means of retrieving, upon receipt of a return request, a desired container from among the above containers from the storeroom, to be conveyed to the station, and conveying, upon receipt of a bar-code 35 data attached to the book to be returned and data on an arbitrary case 13, a container containing the book to be returned stored in the case 13 to the location in the bookshelf 11 by means of the stacker crane 75, the conveyor 77, the conveyor, 80, and the conveyor 82" corresponds, only in the case of "taking out, on receipt of a return request, a container from among the containers, upon receipt of information on the book to be returned, to be conveyed to the station" to the description in Corrected invention 1 of the case, "conveyance means which takes out an available container from the storeroom from among the containers corresponding to the size of a return book, upon receipt of size information of the book to be returned, to be conveyed to the station."

In Corrected invention 1 of the case, since the information stored is updated in response to an input of book information of a book to be taken out (requested book) or a book to be returned (return book) , the description in Invention A-4, "means of deleting the information stored in the hard disk storing the location for the requested book 33 conveyed to the station by the conveying means and data on the cases and the books stored in the containers 12 in association with each other, or additionally storing the location of the case 13 storing the book to be returned in the bookshelf 11 on the hard disk 47, to update the information stored in the hard disk" corresponds, only in the case of "the update means of updating the information on the requested book or return book stored in the storage means, on receipt of an input of book information of the requested book or return book, when conveyed by the conveyance means," to the description in Corrected invention 1 of the case, "update means of updating the information stored in the storage means, for the container conveyed to the station by the conveyance means, from which the requested book has been taken out or the container to which the return book has been returned."

Accordingly, the two correspond to each other in the following points: "A book storing and managing device including: a storeroom having a plurality of shelf areas; a plurality of containers for storing a plurality of books stored in each of the shelf areas of the storeroom; storage means storing storage locations of the containers in the storeroom and book codes of the books stored in the containers, in association with each other; conveyance means which takes out a container storing a requested book from the storeroom, upon receipt of a book code of the book to be taken out, on the basis of the information stored in the storage means, to be conveyed to a station, and takes out a container from the storeroom from among the containers, upon receipt of information on the book to be returned, to be conveyed to the station; and update means of updating the information on the desired book or return book stored in the storage means, upon receipt of information on the requested book or return book." They are different from each other in the following points.

(Different feature 1)

Regarding the shelf areas in the storeroom and the containers storing books, Corrected invention 1 of the case employs "a storeroom having a plurality of shelf areas different in width and height classified by size of book" and "a plurality of containers for storing a plurality of books, each having a size corresponding to a shelf area where each of the containers is stored," while Invention A-4 does not employ the shelf areas different in

width and height classified by size of book or the containers for storing books each having a size corresponding to a shelf area (hereinafter referred to as "Different feature 1").

(Different feature 2)

Regarding the storage means which stores information on conveying a requested book to be taken out or conveying a return book to be returned, storage locations in the storeroom, and book codes of the books stored in the containers, in association with each other, Corrected invention 1 of the case is designed to "update the information stored in the storage means, for the container from which the requested book has been taken out" in taking out the requested book, and to "take out an available container from the storeroom from among the containers corresponding to the size of a return book, upon receipt of size information of the book to be returned, to be conveyed to the station, to update the information stored in the storage means, for the container where the return book has been stored" in returning the return book, while Invention A-4 does not include a configuration of taking out an available container from the storeroom from among the containers corresponding to the size of a return book, upon receipt of size information of the book, or a configuration of updating the information stored in the storage means for the container corresponding to the size of the book (hereinafter referred to as "Different feature 2").

(Different feature 3)

Corrected invention 1 of the case has "the shelf areas in the storeroom storing the containers in a depth direction to a frontage for taking out the container by the conveyance means, the conveyance means including transfer means for taking out a container behind after taking out a front container with respect to the frontage for taking out the containers." However, Invention A-4 is designed to take out a container from the shelf areas in the storeroom by means of the conveyance means, while it is unclear whether the containers are stored in a depth direction and whether the conveyance means includes transfer means for taking out a container behind after taking out a front container with respect to the frontage for taking out the containers (hereinafter referred to as "Different feature 3").

(2) Judgment

(2-1) Examination on Different feature 1

(2-1-1) Outline of the demandant's allegation

The demandant argues roughly as follows, against Different feature 1, in the Written refutation of the trial case p. 12 l. 13-p. 13 l. 24, the Oral proceedings statement brief submitted by the demandant p. 19 l. 4-p. 21 l. 14, and the Written statement submitted by the demandant on November 24, 2011 p. 4 l. 17-p. 5 l. 5.

A) Evidence A No. 1-3 or the like describes a storeroom, in a book in/out managing device, having multiple shelf areas classified by size of book and different in height, and a plurality of containers housing books, which are the same in width and different in height, classified by size of book. As described in Evidence A No. 20 Japanese Unexamined Patent Application Publication No. S59-182103, Evidence A No. 21 Japanese Unexamined Patent Application Publication No. H04-256607, Evidence A No. 22 Microfilm of Japanese Utility Model Application No. S63-58087 (Japanese Unexamined Utility Model Application Publication No. H01-162410), Evidence A No. 28 Japanese Unexamined Patent Application Publication No. S59-172306, Evidence A No. 29 Microfilm of Japanese Utility Model Application No. S58-161944 (Japanese Unexamined Utility Model Application Publication No. S60-072405), it is well known that the containers are moved into/out of a shelf with multiple shelf areas different in width provided in accordance with multiple kinds of articles or containers different in width, and it is also well known that "a plurality of shelf areas different in width and height are provided in accordance with multiple types of containers different in width and height" as described in Evidence A No. 21 Japanese Unexamined Patent Application Publication No. H04-256607 and Evidence A No. 28 Japanese Unexamined Patent Application Publication No. S59-172306. The technology of the storeroom in Corrected invention 1 of the case is in common with the technology of the automatic warehouse. In the storeroom of the Corrected invention 1 of the case, it can be said that a person skilled in the art could easily adopt the idea of forming a plurality of shelf areas different in width and height in accordance with multiple types of containers different in width and height, using the well-known arts in the automatic warehouse, in applying the invention described in Evidence A No. 1-3 or the like to the invention described in Evidence A No. 4.

B) The constituent components of "a storeroom having a plurality of shelf areas different in width and height classified by size of book, and a plurality of containers for storing a

plurality of books, which are to be housed in each of the shelf areas of the storeroom, each having a size corresponding to a shelf area where each of the containers is stored," in Corrected invention 1 of the case, do not specify in the Claims how the "width and height" of the shelf areas and containers corresponding to them correspond to the size of the books. For example, as shown in FIG. 2 in the reference material attached to the Written refutation of the demandant, the Claims do not exclude the case where containers different in "width and height," which do not correspond to the size of books, (the container for A4 format is the smallest, followed by the container for B5 format, and the container for A5 format) are stored in the shelf areas.

The configurations shown in FIG. 2 and FIG. 11 in the patent publication are not specified in Claims 1, 2, and 7 of the case. The demandee's allegation is not based on the description in the scope of claims, and is groundless.

(2-1-2) Outline of the demandee's allegation

The demandee argues roughly as follows, against Different feature 1, in the Written reply p. 12 l. 5-l. 20 and p.17 l. 12-p. 19 l. 13, the Oral proceedings statement brief submitted by the demandee p. 16 l. 3- p. 17 l. 19, and the Written statement submitted by the demandee on November 24, 2011 p. 17 l. 9-p. 18 l. 18.

A) Since Invention A-4 (the invention described in Evidence A No. 4) and Invention A-1 (the invention described in Evidence A No. 1-3 or the like) have different preconditions, Invention A-1 cannot be applied to Invention A-4. Even if Invention A-1 or the inventions on management technology of the automatic warehouse described in Evidences A No. 20 to No. 22 or Evidences A No. 28 and No. 29 are applied to Invention A-4, the "storeroom having a plurality of shelf areas different in width and height classified by size of book" in Corrected invention 1 of the case cannot be obtained.

(2-1-3) Judgment by the body

The matters described in Evidences A No. 21, No. 22, No. 28, and No. 29 will be examined.

According to the description in the above "6-1. (17) A) and B)", it can be

recognized that Evidence A No. 21 describes that shelf areas different in width are arranged in the field of automatic warehouse.

According to the description in the above "6-1. (18) A) and B)," it can be recognized that Evidence A No. 22 describes that shelf areas different in width are arranged in the field of automatic warehouse.

According to the description in the above "6-1. (24) A) and B)," it can be recognized that Evidence A No. 28 describes that shelf areas different in width and height are arranged in the field of automatic warehouse.

According to the description in the above "6-1. (25) A) and B)," it can be recognized that Evidence A No. 29 describes that shelf areas different in width are arranged in the field of automatic warehouse.

In light of the above descriptions, Evidences A No. 21, No. 22, No. 28, and No. 29 describe that shelf areas different in width are arranged in the field of automatic warehouse or that shelf areas different in width and height are arrange in the field of automatic warehouse. It can be said that the matters described above are well-known technical matters.

As described in Evidences A No. 22 and No. 29, it is well known that the objects to be stored in an automatic warehouse are stored in containers. As described in Evidence A No. 29, for example, containers different in size have been conventionally used in accordance with the size of the objects.

In light of the above descriptions, it can be recognized that, according to the descriptions in Evidences A No. 21, No. 22, No. 28, and No. 29, the following matter is a well-known art (hereinafter referred to as "Well-known art 1").

"An automatic warehouse including a warehouse having a plurality of shelf areas different in width and height classified by size of an object to be stored, and a plurality of containers for storing a plurality of objects, each having a size corresponding to the shelf area where the container is stored."

Invention A-4 and Well-known art 1 are common in the point of storing objects in containers or the like and storing the containers in a location having shelves or the like.

Thus, a person skilled art could easily apply the Well-known art 1 to Invention A-4,

to obtain the Corrected invention 1 of the case relating to the Different feature 1.

(2-2) Examination on Different feature 2

(2-2-1) Outline of the demandant's allegation

The demandant argues roughly as follows, against Different feature 2, in the Written demand for trial after correction p. 29 l. 20 to p. 31 l. 31.

Evidence A No. 1-3 or the like describes that, in the book in/out managing device, a computer system to be used in the automated storage and retrieval system (ASRS) uses information, such as "container addresses" of a plurality of containers and "book codes" (bar-code or size code) of a plurality of books (items). It can be said that it is obvious for a person skilled in the art that the computer system needs to store information formed by associating location information indicating where an available container which can store a return book exists in a storeroom with a book code indicating the property of books stored in the container in the location.

According to the well-known arts in Evidences A No. 17 and No. 18 and the description in Evidence A No. 15, it can be understood that the size information of items is used for control also in Evidence A No. 1-3 or the like.

In a book management system, as means for specifying size information of an item (book, or the like), there is known a method of directly inputting information corresponding to the size information (Evidence A No. 17), in addition to a method of preparing book management data by book code in the system and referring to the book management data to specify data on the book (Evidence A No. 16). It is only a design matter for a person skilled in the art to select whether to obtain size information by referring to the information in the system from a read book code, to directly input the size information, or to enable both systems, as necessary.

Thus, it can be said that a person skilled in the art could have easily conceived of the configuration of the Corrected invention 1 of the case relating to the Different feature 2 by employing requested-book control and return-book control using the configuration of containers classified by size described in Evidence A No. 1-3 or the like, and a method of storing the locations in the storeroom in association with book codes of books stored in

each of the containers, in applying the configuration of containers classified by size described in Evidence A No. 1-3 or the like to Invention A-4 described in the above "Regarding Different feature 1." In taking out a container corresponding to the size of an item, it is only a design matter for a person skilled in the art to select whether to obtain size information by referring to the information in the system from the read book code, to directly input the size information, or to enable both systems, as necessary.

(2-2-2) Outline of the demandee's allegation

The demandee argues roughly as follows, against Different feature 2, in the Written reply p. 12 l. 21 to p. 14 l. 24 and p. 19 l. 14 to p. 24 l. 6, the Oral proceedings statement brief submitted by the demandee p. 17 l. 20 to p. 19 l. 21 and p. 21 l. 15 to p. 23 l. 12, the Written statement submitted by the demandee on November 24, 2011 p. 7 l. 10 to p. 10 l. 20, p, 13 l. 3 to p. 17 l. 8, and p. 18 l. 19 to p. 21 l. 13, and the Written statement submitted by the demandee on February 19, 2013 p. 21 l. 6 to p. 26 l. 16.

A) Evidence A No. 1-3 or the like does not disclose or indicate the point of "inputting size information of a book to be returned" and "taking out ... a container ... corresponding to the size of the return book." In both Evidence A No. 4 and Evidence A No. 1-3 or the like, there is no step of inputting information on the book to be returned, for taking out a container. Thus, there exists no idea of taking out a container to be returned from among a plurality of containers, on the basis of the information of the book to be returned. Therefore, even if Evidence A No. 1-3 or the like can be applied to Evidence A No. 4, the Different feature 2 cannot be achieved.

Evidence A No. 15 describes that the height of a book is assigned so as to reliably reach an opening of an appropriate height in a bookshelf (in the library of California State University). However, it is difficult to apply Evidence A No. 1-3 and Evidence A No. 15 to Evidence A No. 4. Even by combining the configuration of taking out a container with an available space for return by use of "full," "not full," and "vacant" of the invention described in Evidence A No. 1-3 or the like, with the configuration of using the height of a book for reliably reaching an opening of an appropriate height of a bookshelf in Evidence A No. 15, the idea of the height of the book for "taking out an available container from

among a plurality of containers corresponding to the size of the return book" cannot be reached.

The invention described in Evidence A No. 17 is an invention of conveying a storage box corresponding to the type of the specification of a book, such as A4 or B5 format, and storing the book into the storage box. The storage boxes are defined with the same size, and have the same width and height. Thus, the technology in the Different feature 1, for preparing shelf areas and containers different in width and height classified by size of book, is not disclosed. In addition, Evidence A No. 17 aims for storing books regardless of the thickness and weight of the books (p. 8 l.1- l.5). There is no motivation to apply the invention described in Evidence A No. 17 to Invention A-4 for improving storage efficiency.

The invention described in Evidence A No. 18, including the description, "the method of the invention is characterized by storing an object as a function of size thereof and storage capacity available in the storage. The object is stored in 'the first' available free space, in consideration of the size thereof," describes only that the size is to be regarded in determining storage location, and does not describe how the size is regarded or how the storage location of the object is determined. Therefore, there is no motivation to apply the invention described in Evidence A No. 18 to Invention A-4 and Evidence A No. 1-3 or the like, including no idea of using book information for controlling selection of an appropriate container from among a plurality of containers in returning a book.

B) As shown in Evidence A No. 1-3 or the like, and pictures of a storehouse (Evidences B No. 1 and No. 2) of the library of California State University in Evidence A No. 15, multiple books of different sizes are stored in one container. As described in Evidence A No. 1-3 or the like p .11, there are five types of containers that are different only in depth, and there is no consideration to store the books in accordance with the width thereof. The number of books of appropriate size to be stored in a width direction depends on the experience of a librarian.

In Evidence A No. 1-3 and Evidence A No. 15, when a book is taken out, a librarian uses a book code marked at the upper end of a book or a note inserted in the book, in a storage state as shown in the images of Evidence B No. 2. It is very difficult to select a book to be taken out from containers. However, comparing with the Corrected invention 1

of the case which allows a librarian to check the back of each of the books, retrieval work efficiency is significantly lower than in the Corrected invention 1 of the case. This disadvantage is caused, of course, due to the absence of size-specific management.

C) The allegation of the demandant described in Evidence A No. 1-3 or the like, "The size code of an item is specified by scanning a bar-code number. The size code is used for control," which is based on the imagination ignoring the precondition of the invention described in Evidence A No. 1-3 or the like, is groundless. The demandant could not explain how to allocate only three types of size codes to five types of containers. It is obvious that the demandant's allegation is based on an unsupported imagination.

Evidence A No. 1-3 does not describe that a size group indicated at an upper end of an item is input to the ASRS system, and does not describe at all that the ASRS system executes "control" (mechanical control without manual operation) based on the size group.

The invention described in Evidence A No. 17 of automatically taking out a storage box corresponding to the type of a book, on the basis of specification information of the book, and the invention described in Evidence A No. 18 of specifying an available storage location to convey a book, on the basis of the size of the book and storage capacity of the library, are based on completely different spirits. It cannot be said that it was well known, before the application, that "the control for book management is conducted by use of size information of a book, in the field of book management device" by generalizing and abstracting the inventions described in Evidences A No. 17 and No. 18, from the inventions described in Evidences A No. 17 and No. 18. As described above, it cannot be said that the technology of "conducting control for book management by use of size information of a book in the field of book management device" was well known before the application of the case was filed. The demandant's allegation that the control is considered to be conducted by use of size information of an item also in Evidence A No. 1-3 or the like on grounds that the technology was well known, is groundless, accordingly.

D) When the "case" in Invention A-4 or the "case storing a book" is replaced by "book," correspondence between the book and storage location is "fixed." It is unclear which configuration of the invention described in Evidence A No. 1-3 or the like is to be applied

to the invention of a so-called fixed location system, and no motivation for the application is found.

E) The process of thoughts leading to the Different feature 2 is not to be evaluated separately from the idea of the Different feature 1, but needs to go through the following two steps.

- Step 1: To apply shelf areas/containers classified by size of book to Invention A-4 (to reach the Different feature 1)

- Step 2: On the basis of the Different feature 1, to take out a container by means of "size information" (to reach the Different feature 2)

Step 2 is based on the idea of the Step 1, and attempts to apply another "invention described in the publication" to a so-called "invention obtained by adding well-known arts to the invention described in a publication," which is an invention obtained by applying well-known technical matters to Invention A-4. The step of decision on the easiness to conceiving the invention in this case is to be based on an invention which is not "the invention described in the publication." The description in Article 29 -2, "when a person skilled in the art can easily invent the invention described in items of the preceding paragraph (corresponding to the invention described in the publication distributed before the application for the Patent, in this case)," is not satisfied, and the step shall not be accepted.

Even if Evidence A No. 1-3 or the like is applied to Invention A-4 so as to reach the Different feature 2 through the above two steps, any of the inventions described in Invention A-4 and Evidence A No. 1-3 does not include the description that a container which can store a return book is conveyed to the station by inputting size information of the book. Thus, "Step 2" (taking out a container by means of "size information, on the basis of the Different feature 1) cannot be reached, and the Different feature cannot be reached.

(2-2-3) Judgment by the body

A) Description of Evidence A No. 1-3 or the like

Evidence A No. 1-3 or the like, which is a publication distributed before the application of the case, describes the book in/out managing device (Library equipment-automated storage and retrieval system (ASRS)), which is a technology belonging to the same technical field as the Corrected invention 1 of the case, and uses five types of containers having a bottom of 24 inches/W 48 inches/L and different heights (6.0-18.0 inches) (Translated abstract p. 11 l. 19-l. 27), and a plurality of books (magazines, or the like) are stored in the containers different in height (Translated abstract p. 12 l. 11-p. 13 l. 1).

The above evidence describes that books called "random storage items" in the above books are classified by size thereof (size code, for example, A, B, and C) (Translated abstract p. 16 the fifth line from the bottom to p. 17 l. 1, and p. 28 l. 8-l. 9).

Therefore, it can be said that Evidence A No. 1-3 or the like describes that the book in/out managing device uses multiple types of containers of sizes corresponding to the books classified by size thereof.

Evidence A No. 1-3 or the like describes on the structure of a bookshelf, "2. a shelf structure having 6 passages including storage positions of 13,260 containers in total" (Translated abstract p. 4 l. 14-l. 15), and "The number of stages: 34 Height of the stage: depth of a container + a maximum of 1.0 inch to the bottom of the next container" (Translated abstract p. 11 l 17-l. 18). As the bookshelf has 34 stages having "a height of depth of a container + a maximum of 1.0 inch to the bottom of the next container," it can be said that the stages classified by size of container constitute a plurality of shelf areas, and that a group of the shelf areas is a storeroom.

In light of the above, it can be said that Evidence A No. 1-3 or the like describes a storeroom having a plurality of shelf areas classified by size of book, for storing multiple types of containers having sizes corresponding to the books and classified by size of book, in the book in/out managing device.

Similarly, Evidence A No. 1-3 or the like describes that "the Automated storage and retrieval system (ASRS) includes a computer system (Translated abstract p. 4 l. 6)," that a container has a "container address" (Translated abstract p. 4 l. 21, p. 24 l. 14, p. 27 l. 2), that an item (book) has a bar-code number of a size code (Translated abstract p. 13 l. 16-l. 17, p. 14 the 3rd line from the bottom to the 5th line from the bottom, p. 16 the 5th line from the bottom to p. 17 l. 1, p. 24 l. 14, p. 28 l. 8-l. 9), that a bar-code number (book code)

attached to an item is optically scanned (Translated abstract p. 28 l. 3-l. 15).

Evidence A No. 1-3 or the like describes also that, in random location storage, there is a priority rule for taking out vacant, partially-full, and full containers (Translated abstract p. 18 l. 3-l. 15), that the AS/RS (Automated Storage and Retrieval System) automatically starts taking out a container with a requested book (item) (Translated abstract p. 24 l. 1-l. 4), that a book (item) to be returned and stored at random is automatically allocated to a container sector from which a book has been just taken out (Translated abstract p. 28 the last line to p. 29 l. 5), that the system takes out a (not-full) container having an available space, when an item is returned without being taken out, as an option of an operator, by using a priority described in No. 2 02. D (Translated abstract p. 17 l. 7-p. 18 the 5th line from the bottom) (Translated abstract p. 29 the 5th line from the bottom to the last line).

Thus, it can be said that Evidence A No. 1-3 or the like describes that, in a book in/out managing device, a computer system to be used in the Automated Storage and Retrieval System (ASRS) uses information such as "container addresses" on a plurality of container and "book codes" (bar-codes or size codes) on a plurality of books (items).

B) Judgment

According to the description in Evidence A No. 1 Specifications (Evidence A No. 1-3 or the like) (hereinafter referred to as "Specifications A-1"), it can be understood that Invention A-1 is "Automated Storage and Retrieval System (ASRS) equipped with containers different in size for storing items (books, or the like), and optically scanning a bar-code number (book code) attached to an item, to automatically take out a required container storing the item from a storeroom" (hereinafter referred to as "Invention A-1"). In random location storage, there is a priority rule for taking out vacant, partially-full, and full containers. In the case of option (in taking out a container for returning a book), a proper container is taken out by use of the priority rule. Here, Specifications A-1 does not clearly describe how to control taking out a container corresponding to the size of an item.

However, according to Evidences A No. 17 and No. 18, it can be recognized that the control for book management using size information of books had been already well known at the filing date of the application, in the technical field of book management device. In Specifications A-1, as a random location storage item has a size code (for

example, A, B, or C), it is reasonable to understand that size information of an item is used for control also in Invention A-1, even if the size code is used for visual confirmation.

Regarding the above, an article in a magazine (Evidence A No. 15) which introduces the Automated Storage and Retrieval System of Specifications A-1 describes that "The library can specify arrangement of books in the automated storage and retrieval system, while there is no need for that, since the computer grasps locations of items. In fact, the automated storage and retrieval system requires only information on height and identification information of each of the items, for each of materials to be stored in the system" (Translated abstract p. 2 l. 8-l. 13). There is consistency with the fact that only the size of item and identification numbers are required for control.

In the book management system, as means for specifying size information of an item (book, or the like), a method of directly inputting information corresponding to size information (Evidence A No. 17), and a method of specifying data on the book by referring to book management data for each book code in the system, are well known. It is only a design matter for a person skilled in the art to select whether to obtain size information by referring to the information in the system from a read book code, to directly input the size information, or to enable both systems, as necessary.

In each of Invention A-4, Invention A-1, and Well-known art 1, an object is stored in a container or the like, and the container is stored in a storage location having shelves.

Therefore, we would have to say that the configuration of Corrected invention 1 of the case relating to the Different feature 2 could have been easily conceived by a person skilled in the art, on the basis of the technical matters relating to Invention A-1, in applying the configuration of containers different in size in Well-known art 1 to Invention A-4 described in "(2-1) Examination on Different feature 1."

However, the demandee submitted Evidences B No. 1 and No. 2 and alleges that Evidence B No. 2 was captured at the same time of acquiring Evidence B No. 1 (Written reply p. 8 margin 1 and Written statement submitted by the demandee on November 24, 2011 p. 4 l. 4-l. 6). Even if the above allegation is correct, the specifications, such as Evidence A No. 1-3 or the like, is an evidence as a publication, and is not an evidence proving that the library system manufactured by the specifications, such as Evidence A No.

1-3 or the like, has been implemented. Since the subjects in the images of Evidence B No. 2 do not have any influence on the matters described in the specifications, such as Evidence A No. 1-3, the contents of technology of Evidence A No. 1-3 or the like cannot be approved with Evidence B No. 2.

(2-3) Examination on Different feature 3

(2-3-1) Invention described in Evidence A No. 5 (Invention A-5)

According to the descriptions A) and B), it can be said that Evidence A No. 5 describes the following matters (hereinafter referred to as "Invention A-5").

(Invention A-5)

"A multi-stacking shelf having a plurality of shelf spaces where a plurality of loading pallets are stored in a depth direction with respect to the frontage from which the loading pallets are taken out by a telescopic fork 3."

(2-3-2) Outline of the demandant's allegation

The demandant argues roughly as follows, against Different feature 3, in the Written demand for trial after correction p. 31 l. 34-p. 32 l. 26, the Written refutation of the trial case p. 16 l.5-p. 17 l. 27, and the Oral proceedings statement brief submitted by the demandant p. 21 l. 26-p.22 l.18.

A) Evidence A-4 (the invention described in Evidence A No. 4) including a plurality of containers 12 in a bookshelf 11 arranged in the storeroom aims for providing an excellent book in/out managing device configured to store a book to be returned in an arbitrary case and housed in a storeroom, and to facilitate check-out/return operation, as described in [0009].

Evidence A No. 5 describes that front and rear containers are arranged in the depth direction with respect to the frontage, and also describes the effect thereof, "The loading pallets 1A, 1B can be easily carried in and out with respect to the front shelf space 4A and a

rear shelf space 4B in a dual shelf, thereby doubling a width of a multi-stacking shelves located at both sides of a lift aisle, while doubling the storage capacity, thereby achieving efficient space utilization in a storehouse or a factory." Since the loading pallet described in Evidence A No. 5 is configured to allow an article to be placed and to move/transfer with the article placed thereon, the loading pallet corresponds to a container. Evidences A No. 5-No. 11 describe, in the indicated matters, that, although it is natural and conventional, a rear container is taken out after taking out a front container which blocks the frontage, when a container, such as a pallet on which an article is placed, is taken out from the frontage. Thus, the Patent invention 1 relating to the Different feature 3 is configured only by arranging a plurality of containers at the front and rear in the depth direction, as described in Evidence A No. 5, in taking out a container by conveyance means from a plurality of shelf areas in the storeroom of Invention A-4, and by employing the conventional means for taking out the container. Therefore, the configuration of the Patent invention 1 relating to the Different feature 3 could be invented by a person skilled in the art, on the basis of the inventions described in Invention A-4 and Invention A-5.

B) A storeroom is a branch of the technology of storehouse. The technology of automatic warehouse is a technology common in the field of technology of warehouse. Specifically, it is described that the storeroom is applied in common to "Storage management method and device" in Evidence A No. 18, to "Storage container carrying mechanism in a device which automatically inputs/outputs storage container to/from storage shelf" in Evidence A No. 24, to an in/out device of "Storeroom" in Evidence A No. 25, to automated carrying in/out of an article in "Storage for book" in Evidence A No. 26, and to "APPARATUS FOR INDIVIDUALLY WAREHOUSING AND DELIVERING ITEM" in Evidence A No. 27, for books, documents, cassettes, records, or components. It is a common well-known problem, in the technology of automatic warehouse as well as the technology of automatic storeroom, to improve storage efficiency and efficiency in carrying in/out operation. The transfer means, moving means, and take-out means in Corrected invention 1 of the case are well known in the automatic warehouse described above. It is clear that the concrete structure is not specified to be specific to a store room, in the scope of claims. A significant effect specific to a storeroom cannot be found in Corrected invention 1 of the case. Thus, Corrected invention 1 of the case could be easily conceived by a person skilled in the art by applying the above well-known arts to the invention described in Evidence A No. 4.

(2-3-3) Outline of the demandee's allegation

The demandee argues roughly as follows, against Different feature 3, in the Written reply p. 14 l. 25-p.17 l. 9, and the Oral proceedings statement brief submitted by the demandee p. 23 l. 13-p. 24-l. 12.

A) Both Invention A-4 (the invention described in Evidence A No. 4) on an automatic storeroom and the inventions described in Evidences A No. 5-No. 11 on an invention of a storehouse are the same at the point of merely a system which carries in/out an article. Even if the description about the automatic warehouse treating books in Evidences A No. 23-No. 27 is taken into consideration, the invention of the storehouse described in Evidences A No. 5-No. 11 cannot be applied to invention A-4.

(2-3-4) Judgment by the body

Comparing Corrected invention 1 of the case with Invention A-5, the "shelf space," "telescopic fork 3," and "loading pallet" in Invention A-5 correspond, in light of the function and technical significance thereof, to the "shelf area," "conveyance means," and "container" in Corrected invention 1 of the case, respectively.

The "multi-stacking shelf" in Invention A-5 corresponds, only as a "storehouse," to the "storeroom" in Corrected invention 1 of the case.

Therefore, when Invention A-5 is expressed by the term in Corrected invention 1 of the case, it can be said that the Invention A-5 is a "storehouse having a plurality of shelf areas where a plurality of containers are stored in a depth direction with respect to a frontage from which the containers are taken out by conveyance means."

It is a conventional well-known technical matter (hereinafter referred to as "Well-known art 2", in the field of warehouse, as described in Evidences A No. 5 to No. 11, to take out a container, such as a pallet on which an article is placed, located behind after taking out a front container which blocks the frontage, when a plurality of containers are stored in a depth direction. As both Invention A-4 and Invention A-5 are an invention of storing an object into a shelf space by use of a container or the like, a person skilled in the art could easily conceive of applying Well-known art 2 to Invention A-4.

Thus, a person skilled in the art could easily obtain the configuration of Corrected invention 1 of the case relating to the Different feature 3, on the basis of Invention A-4, Invention A-5, and Well-known art 2.

(3) Summary

In light of Corrected invention 1 of the case as a whole, the effects thereof could also be easily predicted by a person skilled in the art from the Invention A-4, Invention A-1, Invention A-5, and Well-known arts 1 and 2, and cannot be remarkable.

As described above, Corrected invention 1 of the case could be easily achieved by a person skilled in the art from Invention A-4, Invention A-1, Invention A-5, and Well-known arts 1 and 2.

6-4. Regarding Corrected invention 2 of the case

(1) Corrected invention 2 of the case

Corrected invention 2 of the case corresponds to an invention obtained by adding the matters specifying the invention, "the transfer means includes a take-out mechanism for taking out the front container from the shelf area and a moving mechanism for moving the container behind to the front, and the container behind moved to the front by the moving mechanism is taken out by the take-out mechanism from the shelf area," to Corrected invention 1 of the case.

(2) Comparison

Comparing Corrected invention 2 of the case with Invention A-4, they are different in the Different features 1 to 3, and different also in the following points.

(Different feature 4)

In Corrected invention 2 of the case, "the transfer means includes a take-out

mechanism for taking out the front container from the shelf area and a moving mechanism for moving the container behind to the front, and the container behind moved to the front by the moving mechanism is taken out by the take-out mechanism from the shelf area," while it is unclear, in Invention A-4, whether a container is taken out by conveyance means from a plurality of shelf areas in a storeroom, the containers are stored in a depth direction, and the conveyance means includes transfer means for taking out a rear container after taking out a front container with respect to the frontage where the containers are taken out (hereinafter referred to as "Different feature 4").

(3) Examination on Different feature 4

(3-1) Outline of the demandant's allegation

The demandant argues roughly as follows, against Different feature 4, in the Written demand for trial after correction p. 32 the last line to p. 33 the last line).

Regarding Corrected invention 2 of the case relating to the Different feature 4, it is very common to use, as a mechanism for taking out pallets stored in a depth direction from a frontage where the pallets are taken out, a take-out mechanism for taking out a front pallet from a shelf area and a moving mechanism for moving a pallet behind to the front, and to take out the rear pallet, which has been moved to the front, from the shelf area. The technology is a conventionally well-known technical matter (See the indicated matters in Evidence A No. 5 and the indicated matters in Evidence A No. 6, for example). The loading pallet corresponds to the container in Corrected invention 2 of the case.

Therefore, since the technology of "using a take-out mechanism for taking out a front pallet from a shelf area and a moving mechanism for moving a pallet behind to the front, and taking out the rear pallet, which has been moved to the front, from the shelf area" is a conventionally well-known technical matter, the configuration of Corrected invention 2 of the case relating to the Different feature 4 is only an invention obtained by adding conventionally well-known technical matters.

Thus, the configuration of Corrected invention 2 of the case relating to the Different feature 4 could have been easily invented by a person skilled in the art on the basis of the conventionally well-known technical matters on Invention A-4.

(3-2) Outline of the demandee's allegation

The demandee argues roughly as follows, against Different feature 4, in the Written reply p. 24 l. 16-p. 25 l. 2.

As with the argument that Evidences A No. 5 to No. 11 (invention of warehouse) cannot be applied to Invention A-4 (invention of automatic storeroom), a pallet carrying in/out method in the invention of warehouse described in Evidence A No. 5 or No. 6 to cannot be applied to Invention A-4 relating to an automatic storeroom.

The demandant alleges, according to the matters described in Evidences A No. 5 and No. 6, that the technology, as a mechanism for taking out pallets stored in a depth direction from a frontage where the pallets are taken out, of using a take-out mechanism for taking out a front pallet from a shelf area and a moving mechanism for moving a container behind to the front, and taking out the rear container, which has been moved to the front, from the shelf area is a conventionally well-known technical matter. However, it is not a conventionally well-known technical matter in the technical field of automatic storeroom, at least. It cannot be said that the technology is a conventionally well-known matter in the field of warehouse, only with Evidences A No. 5 and No. 6.

In light of the above, the pallet carrying in/out mechanism in the invention of warehouse described in Evidences A No. 5 and No. 6 cannot be applied to Invention A-4. It cannot be said that a person skilled in the art could have easily conceived of Corrected invention 2 of the case.

(3-3) Judgment by the body

As described in "6-4. (2-3-4)" relating to the judgment for the Different feature 3, the technology of taking out a container, such as a pallet on which an article is placed, located behind after taking out a front container which blocks the frontage, when a plurality of containers are stored in a depth direction is a conventionally well-known technical matter (Well-known art 2) in the field of warehouse. Considering the description of "6-1. (5)" in Evidence A No. 5, presented as an example of Well-known art 2, description of FIGS. 1-4, FIG. 9, and FIG, 10, it can be said that Evidence A No. 5 describes the

following technology (hereinafter referred to as "Technology described in A-5").

"The technology including a telescopic fork 3 ['take-out mechanism'] for taking out a front loading pallet 1A [which corresponds to the 'front container in Corrected invention 2 of the case," "indicating corresponding matters described in the invention of Corrected invention 2 of the case] from a shelf space ['shelf area'], and a telescopic fork 3 ['moving mechanism] (equipped with a holding part 5 to be engaged with an engaging part 6 of a loading pallet 1B) for moving the rear loading pallet 1B ['rear container'] to the front, and configured so that the rear loading pallet 1B ['rear container'], which has been moved to the front by the telescopic fork 3 ['moving mechanism'] is taken out from the shelf space ['shelf area'] by the telescopic fork 3 ['take-out mechanism']."

Therefore, a person skilled in the art could have easily embodied the Technology described in A-5 in applying Well-known art 2 to Invention A-4.

(4) Summary

In light of Corrected invention 2 of the case as a whole, the effects thereof could also have been easily predicted by a person skilled in the art from the Invention A-4, Invention A-1, Invention A-5, Technology described in A-5, and Well-known arts 1 and 2, and cannot be remarkable.

As described above, Corrected invention 2 of the case could have been easily achieved by a person skilled in the art from Invention A-4, Invention A-1, Invention A-5, Technology described in A-5, and Well-known arts 1 and 2.

6-5. Regarding Corrected invention 3 of the case

(1) Corrected invention 3 of the case

Corrected invention 3 of the case corresponds to an invention obtained by adding the matters specifying the invention, "the transfer means includes first and second take-out means for selectively taking out and holding the front container and the container behind,

and the container behind is taken out by the second take-out means to be conveyed to the station, with the front container taken out and held by the first take-out means" to Corrected invention 1 of the case.

(2) Comparison

Comparing Corrected invention 3 of the case with Invention A-4, they are different in the Different features 1 to 3, and different also in the following points.

(Different feature 5)

In Corrected invention 3 of the case, "the transfer means includes first and second take-out means for selectively taking out and holding the front container and the container behind, and the container behind is taken out by the second take-out means to be conveyed to the station, with the front container taken out and held by the first take-out means," while it is unclear, in Invention A-4, which is configured to take out a container from a plurality of shelf areas of a storeroom by conveyance means, whether a plurality of containers are stored in a depth direction and whether the conveyance means includes transfer means for taking out a rear container after taking out a front container with respect to the frontage where containers are taken out (hereinafter referred to as "Different feature 5").

(3) Examination on Different feature 5

(3-1) Outline of the demandant's allegation

The demandant argues roughly as follows, against Different feature 5, in the Written demand for trial after correction p. 34 l. 1-p. 35 l. 6.

Regarding the configuration of Corrected invention 3 of the case relating to the Different feature 5, it is very common to use, as a mechanism for taking out pallets stored in a depth direction from a frontage where the pallets are taken out, first and second take-out means for selectively taking out and holding a front pallet a rear pallet, and to take out the rear pallet by the second take-out means, with the front pallet taken out and held by the first take-out means. The technology is a conventionally well-known technical matter (See the indicated matters in Evidences A No. 7, No. 8, and No. 9, for example). The pallets in

Evidences A No. 7 and No. 8 and loads 2, 3 in Evidence A No. 9 correspond to the container in Corrected invention 3 of the case.

Therefore, since the technology of "using, as a mechanism for taking out pallets stored in a depth direction from a frontage where the pallets are taken out, first and second take-out means for selectively taking out and holding a front pallet a rear pallet, and taking out the rear pallet by the second take-out means, with the front pallet taken out and held by the first take-out means" is a conventionally well-known technical matter, the configuration of Corrected invention 3 of the case relating to the Different feature 5 is merely an invention obtained by adding conventionally well-known technical matters.

Thus, the configuration of Corrected invention 3 of the case relating to the Different feature 5 could have been easily invented by a person skilled in the art on the basis of the conventionally well-known technical matters on Invention A-4.

(3-2) Outline of the demandee's allegation

The demandee argues roughly as follows, against Different feature 5, in Written reply p. 25 l. 3-l. 19.

As with the argument that Evidences A No. 5 to No. 11 (invention of warehouse) cannot be applied to Invention A-4 (invention of automatic storeroom), a pallet carrying in/out method in the invention of warehouse described in Evidences A No. 7, No. 8, and No. 9 cannot be applied to Invention A-4 relating to an automatic storeroom.

The demandant alleges, according to the matters described in Evidences A No. 7, No. 8, and No. 9, that the technology of using, as a mechanism for taking out pallets stored in a depth direction from a frontage where the pallets are taken out, first and second take-out means for selectively taking out and holding a front pallet and a rear pallet, and taking out the rear pallet by the second take-out means, with the front pallet taken out and held by the first take-out means is a conventionally well-known technical matter. However, it is not a conventionally well-known technical matter in the technical field of automatic storeroom, at least. It cannot be said that the technology is a conventionally well-known matter in the field of warehouse, only with Evidences A No. 7, No. 8, and No. 9.

In light of the above, the pallet carrying in/out mechanism in the invention of

warehouse described in Evidences A No. 7, No. 8, and No. 9 cannot be applied to Invention A-4. It cannot be said that a person skilled in the art could have easily conceived of Corrected invention 3 of the case.

(3-3) Judgment by the body

As described in "6-4. (2-3-4)" relating to the judgment for the Different feature 3, the technology of taking out a container, such as a pallet on which an article is placed, located behind after taking out a front container which blocks the frontage, when a plurality of containers are stored in a depth direction is a conventionally well-known technical matter (Well-known art 2) in the field of warehouse. Considering the description of "6-1. (8)" in Evidence A No. 8, presented as an example of Well-known art 2, and the description of FIGS. 3-6, it can be said that Evidence A No. 8 describes the following technology (hereinafter referred to as "Technology described in A-8.")

"The technology including a single fork and a double-reach fork ['first and second take-out means'] for selectively taking out a front pallet [which corresponds to the 'front container' in Corrected invention 3 of the case," "indicating corresponding matters described in the invention of Corrected invention 3 of the case and a rear pallet ['rear container'] (into carriages 8, 9) to be held, and configured to take out the rear pallet ['rear container'] with the double-reach fork, with the front pallet ['front container'] taken out by the single fork ['first take-out means'] and held (in the carriage 8), to be conveyed to the station."

Therefore, a person skilled in the art could have easily embodied the Technology described in A-8 in applying Well-known art 2 to Invention A-4.

(4) Summary

In light of Corrected invention 3 of the case as a whole, the effects thereof could also have been easily predicted by a person skilled in the art from the Invention A-4, Invention A-1, Invention A-5, Technology described in A-8, and Well-known arts 1 and 2, and cannot be remarkable.

As described above, Corrected invention 3 of the case could have been easily achieved by a person skilled in the art from Invention A-4, Invention A-1, Invention A-5,

Technology described in A-8, and Well-known arts 1 and 2.

7. Closing

Corrected inventions of the case 1 to 3 could have been easily invented by a person skilled in the art, on the basis of Invention A-4, Invention A-1, Invention A-5, Technologies described in A-5 and A-8, and Well-known arts 1 and 2. The patents regarding Corrected inventions of the case 1 to 3 violate the provisions of Article 29-2 of the Patent Act, fall under Article 123-1 (2) of the Patent Act, and should be invalidated.

The costs in connection with the trial shall be borne by the demandee under the provisions of Article 61 of the Code of Civil Procedure which is applied mutatis mutandis in the provisions of Article 169-2 of the Patent Act.

April 23, 2013

Chief administrative judge: ITO, Asahito

Administrative judge: FUJIWARA, Naoyoshi

Administrative judge: YANAGIDA, Toshio