# Trial decision

Invalidation No. 2011-800009

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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 April 23, 2013 came with a court decision of revocation of the trial decision (2013 (Gyo-Ke) 10153, decision on October 7, 2013) 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 inventions 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

No. 1. History of the procedures

1. A patent application for the inventions 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. The brief history from the demand for invalidation trial of the case to the trial decision of December 21, 2011 (hereinafter referred to as "the first trial decision")

(1) 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 as of March 9, 2011 is referred to as "the written demand for trial after correction").

(2) NIPPON FILING CO., Ltd. (hereinafter referred to as "demandee") submitted Evidences B No. 1 and No. 2 as a written reply 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 "the Correction of the case") on May 16, 2011, and submitted a Written statement on May 19, 2011.

(3) 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.

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

(5) 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.

(6) 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.

(7) In light of the above, the first trial 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," was made as of December 21, 2011.

3. The brief history leading to the trial decision as of April 23, 2013 (hereinafter referred to as "the second trial decision")

(1) Against the first trial decision, 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 on December 11,

2012 (hereinafter referred to as "the first court decision").

(2) 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.

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

(4) The decision, "The correction shall be approved. The patents 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." was made on April 23, 2013 (hereinafter referred to as "the second trial decision").

4. The brief history after the second trial decision

(1) Against the second trial decision, the demandee brought an action for revocation of the trial decision on May 29, 2013 (2013 (Gyo-Ke) 10153, October 7, 2013) to the Intellectual Property High Court, and demanded a trial for correction (Correction No. 2013-390119) on August 23, 2013, which is within a period of 90 days. The Intellectual Property High Court made a decision of revocation of the trial decision on October 7, 2013, under the provisions of Article 181-2 of the Patent Act before revision, of which the provisions then in force shall remain applicable according to supplement Article 2-24 of the Act No. 63 of 2011.

(2) Since the demandee did not demand a trial for correction within a period designated in the notice of period for the demand for correction as of October 23, 2013, it was deemed to have demanded correction (hereinafter referred to as "demand for Correction of the case") incorporating the scope of claims and specifications attached to the written demand for the trial for correction, on the last day of the period, under the provisions of Article 134-3 (5) of the Patent Act before revision, of which the provisions then in force shall remain applicable according to supplement Article 2-18 and 19 of the Act No. 63 of 2011.

(3) Against this, the demandant submitted a Written refutation of the trial case on March 28, 2014, and submitted Evidence A No. 30 as means of proof.

No. 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 follows.

A) The Patent inventions 1 to 3 could be 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 invention in accordance with the provisions of Article 29-2 of the Patent Act.

B) Regarding Correction A, the first court decision and the second trial decision ruled that it could be easily conceived, as a problem of "storing a plurality of containers in a depth direction" in Different feature 3.

C) Regarding Correction C, the first court decision and the second trial decision ruled that it could be easily conceived as Different feature 1.

D) Regarding the inventions relating to Claims 1,2, and 7 including Correction B, there exist reasons for invalidation because of violation of Articles 36- 6 (1) and (2).

E) Correction B is only a matter obtained by adding common means in a technical field of book storing and managing device, and does not provide a basis for establishing the inventive step, as is the case with Corrections A and C.

<Means of proof>

Evidence A No. 1-1: Notarized written statement of Douglas A Davis as 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 as 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 as 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 on 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 No. S60-072405")

Evidence A No. 30: Japanese Utility Model Publication No. S63-12085

## <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. 201. 19-1. 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 1. 20-1. 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.

No. 3 Outline of the demandee's allegation

It cannot be said that Patent inventions 1 to 3 after correction could be easily invented by a person skilled in the art on the basis of the invention described in Evidence A No. 4, and Evidence A NO.2-3,Evidence A NO3-3 or Evidence A No. 5

<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)

No. 4 Regarding demand for Correction of the case

1. Content of the demand for Correction of the case

The correction (hereinafter referred to as "Correction of the case") demanded by the demandee with the demand for Correction of the case is to correct the specification of Patent No. 2851237 as the corrected specification attached to the written request, and to, regarding Claims 1, 2, and 7 of the scope of claims of the patent relating to the demand for trial of invalidation of the case, correct the following contents a) to the following contents b) (line feeds, which are the same as Claim 1 before correction, and underlines (indicating corrections) were added by the body).

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

10 / 82

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 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 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 requested 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, and

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 so 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 so 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."

11 / 82

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 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 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 requested book has been taken out or the container to which the return book has been returned,

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

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, and configured to preferentially use the front container of the two containers stored in the depth direction, as the available container.

[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 so 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 so 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."

The matters of correction are as follows.

## (1) Correction A

To correct the description in Claim 1, "storing the containers in a depth direction" to the description, "storing <u>two</u> containers in a depth direction."

## (2) Correction B

To correct the description in Claim 1, "including transfer means," to the description, "including transfer means <u>and configured to preferentially use the front container of the two</u> <u>containers stored in the depth direction, as the available container.</u>"

## (3) Correction C

To correct the description in Claim 1, "a storeroom having a plurality of shelf areas classified by size of book," to the description, "a storeroom having a plurality of shelf areas <u>different in width and height</u> classified by size of book."

## 2. Propriety of the correction

## (1) Correction A

Reducing the number of containers from "containers" to "two containers" is limiting the number of containers from plural to two. It can be said that Correction A is intended for restriction of the scope of claims.

Correction A is based on the description in [0027] of the specification (hereinafter referred to as "Specification of the case") attached to the application of the patent, "Here,

the bookshelves 11a and 11b are, as shown in FIG. 4, configured by arranging a plurality of (eleven, in the figure) container receivers 11a1, 11a1, ..... and 11b1, 11b1, ..... in a vertical direction at predetermined intervals. In each of the container receivers 11a1, 11a1, ..... and 11b1, 11b1, ..... two containers 12, 12 are stored in a depth direction as seen from the stacker crane 13 arranged between the bookshelves 11a and 11b," and the description of [FIG. 4] in the drawings (hereinafter referred to as "Drawings of the case") attached to the application of the patent.

Thus, Correction A is a technical matter which can be derived from the matters described in the Specification of the case or the Drawings of the case, and does not introduce new technical matters. Correction A is within the matters described in the Specification of the case or the Drawings of the case, and does not substantially enlarge or modify the scope of claims of the patent.

## (2) Correction B

Correction B, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," limits a priority rule for using available containers during return, as described in Claim 1, "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."

In the column [Operation] of the Specification of the case, there is a description, "The working efficiency in taking out and returning a book can be effectively improved by using a management method of using a front container preferentially" ([0016]). As for taking out an available container, according to especially [0074] to [0076] in the Specification of the case and a flowchart in FIG. 19, it can be understood that a front container is used in preference to a rear container when the front container has a filling rate of 0-79% (rank A to rank C). According to especially [0072] to [0073] in the Specification of the case and flowcharts in FIG. 19 and FIG. 20, it can be understood that a front available container of rank D having a filling rate of 80-99%, which is not rank E (full), is used in preference to a rear container, when both front and rear containers have rank D or lower (a filling rate of 80% or more) (Note by the body: the description "rank D or lower" in [0071] and step S50 and step S51 in FIG. 20 is considered to be an error for "rank E or lower"). Thus, Correction B is a technical matter which can be derived from the matters described in the Specification of the case or the Drawings of the case, and does not introduce new technical matters. Correction B is within the matters described in the Specification of the case or the Drawings of the case, and does not substantially enlarge or modify the scope of claims of the patent.

## (3) Correction C

Regarding the plurality of shelf areas, since the shelves are limited to have different lengths in two direction, "width" and "height," it can be said that Correction C, "different in width and height," is intended for restriction of the scope of claims.

Correction C is based on the description in [0041] of the Specification of the case, "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], "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=600mm, W=509mm, and H=313mm,

the container 12 storing the book 30 in A5 format has

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

L=600mm, W=385mm, and H=230mm"; and [FIG. 11] in the Drawings of the case.

Thus, Correction C is a technical matter which can be derived from the matters described in the Specification of the case or the Drawings of the case, and does not introduce new technical matters. Correction C is within the matters described in the Specification of the case or the Drawings of the case, and does not substantially enlarge or modify the scope of claims of the patent.

## (4) 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.

3. 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 and the Drawings of the case. 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 as described in the above No. 2 1. b).

No. 5 Regarding the reasons for invalidation

### 1. Requirements for clarity (Article 36-6(2) of the Patent Act)

(1) The demandant's allegation

The priority rule for selecting a container in Correction B, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," is extremely ambiguous. Thus, as for the description in Correction B, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," there are no concrete matters about how to "preferentially use" an available front container of two containers stored in the depth direction."

The description "to preferentially use the front container" may be interpreted as follows:

(a) a front container is used first, and a rear container is used only when all front containers become full;

(b) the probability of selecting a front container is made higher than the probability of selecting a rear container when both front and rear container are available (for example, when both the front and rear containers are available, the front containers is selected at 80%, while the rear container is selected at 20%, thereby using the front container "preferentially");

(c) a container of higher vacancy, or low filling rate, is used on the basis of filling rates of the front and rear containers, while a front container is used when the front and rear containers have the same filling rate (rank) (Claims 5 and 6 specify that a container of "low filling rate" is taken out "preferentially," while Correction B does not specify taking out the container of "low filling rate"); and

(d) a front container is used until the filling rate thereof reaches a predetermined level (80%, for example), and a rear container is used only when the filling rates of all the front containers reach the predetermined level.

However, Correction B does not clearly specify a mode of "preferential" use. Thus, Correction B describes only that the "front container" is "preferentially used" as an "available container," and does not specify a concrete matter for "preferential use." Therefore, the technical meaning of the term "preferential" is unclear, and no technical matter is specified.

## (2) Judgment

As described in No. 4 2. (2), the description in Correction B, "to preferentially use the front container as the available container" is a correction based on the contents of the Specification of the case and the Drawings of the case, and specifies a priority rule for using a front container in preference to a rear container, as an available container of a filling rate of 0-99%, not full.

Examining Corrected invention 1 of the case as a whole, Corrected invention 1 of the case including the matters specifying the invention, "to preferentially use the front container as the available container," of Correction B, can be clearly understood.

#### 2. Requirements for support (Article 36-6(1) of the Patent Act)

#### (1) The demandant's allegation

The description in Correction B, "to preferentially use ... as the available container," in the description, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," does not concretely specify "means for solving the problem" of the Re-corrected invention 1 of the case, but departs from the scope of claims described in the specification. Thus, there exist reasons for invalidation, because of violation of Articles 36-6 (1).

As described in [0016] of the Specification of the case, "[Operation] ... The working efficiency in taking out and returning a book can be effectively improved by using a management method of using a front container preferentially," there is a description about "using a front container preferentially," while it cannot be said that all of the means for solving the problem (configuration) for the "management method of using a front container preferentially" are disclosed in the Specification of the case with the above description. Even if Correction B includes all of various meanings such as the above (a) to (d), no embodiment for supporting the technical matters shown in (a) to (c) is disclosed in the Specification of the case, at least. Since the means for solving the problem of Re-corrected invention 1 of the case described in the detailed description of the invention, "To provide an extremely excellent book storing and managing device configured to improve storage efficiency of books in a storeroom, and to effectively improve the efficiency in taking out and returning the books due to automation" (see [0014]), is not reflected in Claims, Correction B claims for a patent beyond the scope described in the detailed description of the invention. Therefore, it cannot be said that the invention relating to Claim 1 including the point of Correction B, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," substantially corresponds to the invention described in the detailed description of the invention.

#### (2) Judgment

As described in No. 4 2. (2), the description in Correction B, "to preferentially use the front container as the available container" is a correction based on the contents of the

Specification of the case and the Drawings of the case, and specifies a priority rule for using a front container in preference to a rear container, as an available container of a filling rate of 0-99%, not full.

Examining Corrected invention 1 of the case as a whole, Corrected invention 1 of the case including the matters specifying the invention, "to preferentially use the front container as the available container," of Correction B, is obviously described in the detailed description of the invention.

3. Regarding inventive step of Corrected inventions 1 to 3 of the case (Article 29-2 of the Patent Act)

3-1. 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 that 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. 41.3),

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 services, 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 a 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 mean "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),

20 / 82

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.

Size of container		<u>Quantity</u>
24 inches/W $\times$ 48 inches/L $\times$ 6.0 inches/D		390
24 inches/W $\times$ 48 inches/L $\times$ 10.0 inches/D		7,020
24 inches/W $\times$ 48 inches/L $\times$ 12.0 inches/D		5,070
24 inches/W $\times$ 48 inches/L $\times$ 15.0 inches/D		390
24 inches/W $\times$ 48 inches/L $\times$ 18.0 inches/D		<u>390</u>
	Total	13,260

The containers required are as follows.

## (...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

<u>Form</u>	<u>Total quantity</u>	9	Quantity/Conta	ainer <u>H</u>	leight of cont	ainer
1. Books and magazin	ies	950,000	)	96		10 inches
			64		12 incl	nes

21 / 82

		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), 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 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 1. 4-p. 14 1. 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 a 14-digit number as follows.

## <u>3 0700 1014742 0</u>

(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 entry 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...)

23 / 82

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 rule.

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) In 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 in p. 15 (Note: the translation p. 20) illustrates 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)

24 / 82

"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 as drawings.

(2) 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, 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 vicepresident 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 was filed, 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 requested 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 is 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 is stored; automatic delivery means which automatically retrieves a case housing a book to be discharged from the storeroom, on the basis of the information 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; and automatic receiving means which automatically receives the case storing the book; and automatic receiving 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  $28 \pm 82$ 

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 freely move. 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 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, ... has a bar-code 34, and each book 33 has a bar-code 35. (...Omitted...)" ([0016]-[0018])

F) "[0020] FIG. 4 illustrates a control system of the book in/out managing system shown in FIG. 1. Reference numeral 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 conveyor 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 requested 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 requested 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 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 on the hard disk 47 (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, on 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 obtained 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 34 data read from the case 13 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, to 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 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, on 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 Written reply, Oral proceedings statement brief submitted by the demandee, 34/82

Written statement submitted by the demandee on November 24, 2011, and 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 1. 7 to lower right column 1. 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 respective 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 1. 5 to lower left column 1. 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 36/82
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 was filed, 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 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 1. 2 to upper right column 1. 6)

B) Due to the restrictions of a forkmoment load, it is most practical to employ two doublereach forks, (...Omitted...) however, in this case, one double-reach fork and one singlereach 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. 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. The stops so that the single-reach 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. 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 1.15 to lower left column 1.16)

(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 the direction of a horizontal A arrow 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 stacker crane 6 conveys only the load 2 to an outlet." (p. 3 upper left column 1. 10 to upper

right column 1.6)

(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 "STOREHOUSE EQUIPMENT."

A) "A delivering tool (13) is moved in/out by an 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 1. 4-1. 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 was filed, 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 1. 8-1. 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 is 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 is 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 insertion of the book (2). 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. 21. 17-p. 41. 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 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)

42 / 82

(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.

43 / 82

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 1. 2-1. 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. 21. 11-p. 31. 4)

(19) Evidence A No. 23 (Japanese Utility Model Publication No. S54-001750) is a publication distributed before the application was filed, 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 stored many 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 was filed, 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 stored many 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 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 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 in 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. 21.9)

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 in 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 3." (p.

4 l.10-p. 5 l. 3)

(26) Evidence A No. 30 (Japanese Utility Model Publication No. S63-12085) is a publication distributed before the application was filed, and describes the following matters with the drawings on "Article storage equipment."

A) "This device relates to article storage equipment which can be applicable to a bookshelf in a library, or a tool tray." (p. 1 the first column l. 14-l. 15)

B) This device was proposed to eliminate the above conventional disadvantages, and provides article storage equipment equipped with shelves storing a plurality of containers, the shelf storing a plurality of containers, inclined toward an outlet, and having an inclined rail with rollers, and the container having a lower bottom parallel to the inclined rail and sliding on the rail, and a horizontal upper bottom arranged above the lower bottom so as to keep a cargo horizontal, and is configured to arrange a conveyance device with a fork which is inserted into a space between the lower and upper bottoms to lift a container to be taken out, so as to be moved vertically and laterally, thereby reducing the size of a warehouse and easily carrying in/out a container." (P.1 the second column l. 11-p. 2 the third column l. 8)

C) "A stopper 9 is arranged in a carry in-out port of each of the storage shelves and inclined rails 1. A lower end of a (the first) container located closest to the carry in-out port of the containers 2 on the inclined rail 1 and rollers 4 is locked at the stopper.

In carrying out the first container 2, after inserting the fork 5 of the conveyance device 3 into the wedged space 8, the container is lifted with the fork 5 slightly (at a height so as to clear the height H of the stopper 9) and the fork is contracted." (p. 2 the third column 1. 23-1. 32)

D) "After the first container 2 is carried out, a container 2 located next slides on the roller under its own weight and is located at the front row automatically. A container number

attached on a front face with a magnetic card 10 is read when the conveyance device 3 lifts the container, so as to store a storage location. The number 11 indicates an operation board, to operate the conveyance device 3, and is configured to carry out a container automatically when a container number is designated. The number 12 is a shelf frame." (p. 2 the third column 1. 33 to the fourth column 1. 7)

E) "As for the operation, a carry in-out door is opened first, and a container 2 is put in. When a storage instruction is issued with the operation board 11, the container is moved automatically to an available shelf, and stored by pushing a container which has been already contained.

A container number and a location are stored during storage operation. In carrying out a container, the container is automatically carried out by designating the container number with the operation board 11. The container pushed behind is carried out after moving the container located closer to an outlet to another available shelf.

Since the device is configured as described in detail above, passage area of the conveyance device can be reduced and more shelves can be arranged, thereby improving storage efficiency." (p. 2 the fourth column l. 8-l. 20)

3-2. 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

The demandee alleges that the demandee has no knowledge about whether the project specifications, such as 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 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).

#### 3-3. 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 containers in the storeroom and book codes of the books stored in the codes of the book

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 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 vention 1 of the case, "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," to the description in Corrected invention 1 of the case, "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," to the description in Corrected invention 1 of the case, "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."

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 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, upon receipt of a return request, a container from among the containers, on 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, upon 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 requested 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 upon 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 stored in the storage means, for the storage means, for the container from 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 container from the storeroom from among the container form the storeroom form among the container from the storeroom from among the container form 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").

## (Different feature 4)

Regarding a priority rule for using available containers during return,

Corrected invention 1 of the case describes, "preferentially use the front container of the two containers stored in the depth direction, as the available container," while Invention A-4 includes no clear description about the priority rule (hereinafter referred to as "Different feature 4").

## (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 Written refutation of the trial case p. 12 l. 13-p. 13 l. 24, Oral proceedings statement brief submitted by the demandant p. 19 l. 4-p. 21 l. 14, and 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 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 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 Publication No. S58-161944 (Japanese Unexamined Utility Model Application Publication No. S58-161944 (Japanese Unexamined Utility Model Application Publication 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 in accordance with multiple types of shelf areas different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different in width and height in accordance with multiple types of containers different 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 that 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 as of 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 "3-1. (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 "3-1. (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 "3-1. (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 "3-1. (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 area different in width and height are arranged 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 conventionally been 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").

"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 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 address" of a plurality of containers and "book code" (barcode 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), 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), are 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.

Thus, it can be said that a person skilled in the art could easily conceive of the configuration of the Corrected invention 1 of the case relating to the Different feature 2 by employing requested-book 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 Written reply p. 12 l. 21 to p. 14 l. 24 and p. 19 l. 14 to p. 24 l. 6, 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, Written statement submitted by the demandee as of 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 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 the 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 1.1-1.5). 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 the 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 different only in depth, and there is no consideration to the store 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 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, or 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 61/82

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 was filed, 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, from the inventions described in Evidences above, it cannot be said that the technology of "conducting control for book management by use of size information of a book management device" was well known before the application of the case was filed. Accordingly, 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.

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 filing of 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, none of the inventions described in Invention A-4 and Evidence A No. 1-3 includes 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 was filed, 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, which 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 1. 19-1. 27), and that a plurality of books (magazines, or the like) are stored in the containers different in height (Translated abstract p. 12 1. 11-p. 13 1. 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), and 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 1. 3-1. 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 containers and "book codes" (bar-codes or size codes) on a plurality of books (items).

It is obvious for a person skilled in the art that the computer system needs to store storage location information indicating locations in the storeroom of a plurality of vacant, partially full, and full containers, or containers having a space for storing a return book, in association with book information showing a property of a book stored in the container located in the storage location, in order to cause the AS/RS (Automated Storage and Retrieval System) to perform a predetermined operation for taking out or storing a book. It can be said that Evidence A No. 1-3 or the like describes technical matters for storing take-out control for a requested book, return control for a return book, storage locations in the storeroom, and book codes of books stored in each of the containers, in association with each other.

## 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 an "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 already been 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()Evidence A NO.16), 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 be 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 as of 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, constitute evidence as a publication, and are not 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 Written demand for trial after correction p. 31 l. 34-p. 32 l. 26, Written refutation of the trial case p. 16 l.5-p. 17 l. 27, and 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 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 Written reply p. 14 l. 25-p.17 l. 9, and 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 terms 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 (two) containers are stored in a depth direction with respect to a frontage from which the containers are taken out by conveyance means."

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 difference between them is whether a book is stored or a general cargo is stored. It is a well-known problem in a field of bookshelf or warehouse to improve receiving-discharging efficiency and storage efficiency (the first court decision p. 44 l. 20-l. 22). It can be said that a person skilled in the art could easily conceive of applying Invention A-5 in order to improve storage efficiency in Invention A-4.

It is conventional well-known technical matters (hereinafter referred to as "Wellknown art 2," in the field of warehouse, as described in Evidences A No. 5, and No. 6 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 69 / 82

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.

### (2-4) Examination on Different feature 4

#### (2-4-1) Outline of the demandant's allegation

Evidence A No. 1-3 describes taking out an available container of a plurality of containers for storing a return book which is to be returned, in the Automated storage and retrieval system (AS/RS).

Evidence A No. 5 describes the invention, "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" (the second trial decision p. 49 l. 1-l. 3).

As described in Evidences A No. 9 and No. 30, in storage equipment configured to store a plurality of containers in a depth direction, a front container blocks the way of a rear container to be carried out. It is a technical common sense for a person skilled in the art that the efficiency of carrying in/out a container located behind is made lower than the case of carrying in/out a front container. Thus, it is natural to use the front container blocking the frontage in preference to the rear container. It can be said that the matter described in Correction B, "to preferentially use the front container of the two containers stored in the depth direction, as the available container" is well-known means in the technical field of book storing and managing device.

As described in Evidence A No. 5, "The loading pallets 1A, 1B can be easily carried in and out ..., thereby doubling a width of a multi-stacking shelves ..., while doubling the storage capacity, thereby achieving efficient space utilization in a storehouse or a factory," (p. 3 upper right column l. 6-l. 12), there is a problem of improving carry-in/out efficiency also on an automatic warehouse. Both automatic warehouse and automatic storeroom have the problem of improving carry-in/out efficiency in return operation (carry-in operation).

Evidence A No. 8 (Japanese Unexamined Patent Application Publication No. S57-072503) describes that the warehouse also needs to improve storage efficiency and carryin/out efficiency with quick return (carry-in) operation. It is obvious that the automatic warehouse also considers a technical problem of improving working efficiency (improving carry-in/out efficiency) in return (carry-in) operation as well as the automatic storeroom. Therefore, the demandee's allegation that there is no return concept in the automatic warehouse and that there is no problem of improving carry-in/out operation in return operation is unreasonable.

The necessity of improving carry-in/out efficiency in the point of "significantly improving storage efficiency and carry-in/out efficiency" is, as described in the above (A), a well-known matter for both storehouse and warehouse.

Regarding this point, the first court decision (2012 (Gyo-Ke) 10038) explicitly judged, "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 difference between them is whether a book is stored or a general cargo is stored. It is a well-known problem in a field of bookshelf or warehouse to improve receiving-discharging efficiency and storage efficiency" (p. 441. 18-44). The allegation of the demandee is only bringing up the matters already judged by the court.

There are many automatic storerooms which do not embody the corrected invention, other than the product of the demandant. There are also many automatic storerooms configured to actually arrange a single container in a depth direction, which is considered by the demandee to be "useless," and a lot of free-location automatic storerooms configured to arrange a single container in a depth direction are employed in the world. An automatic storeroom configured to arrange a single container in a depth direction can achieve efficient storage efficiency and carry-in/out efficiency by employing free-location technology. Thus, there is no commercial success alleged by the demandee.

### (2-4-2) Outline of the demandee's allegation

The configuration of "preferentially using the front container of the two containers stored in the depth direction, as the available container" is not described in any of Evidence A No. 4, Evidence A No. 1-3, Evidence A No. 3, and other prior art documents.

Invention A-4 and Invention A-1-3 are configured to store one container in a depth direction, and have no concept of a "front container." The inventions are not intended to employ the priority rule on the use of an available container for return.

Invention A-5, which is configured to store two pallets in a depth direction, is an automatic warehouse, and has no concept of return operation. There is no problem of improving carry-in/out efficiency in return operation. Therefore, Invention A-5 regarding an automatic warehouse includes no description or indication on Correction B.

Invention A-5 regarding the warehouse, which is a cargo system mainly for lotbasis flow-through (where articles pass through only and do not flow backward), is configured to sequentially carry in/out front and rear pallets. Therefore, since Invention A-5 is not an invention configured to take out one book from a container to be returned definitely, such as the Collected invention of the case, there is no concept of taking out rear and front loading pallets separately or returning them to the original storage positions, and the invention does not need to consider a technical problem of improving working efficiency (improving carry-in/out efficiency) through the operations (for sequential carryin, p. 2 upper right column l. 6 to lower left column l. 6, see FIGS 5 to 8). Thus, Invention A-5 includes no description or indication about an idea of preferentially using the front container of available containers during return operation.

The corrected invention of the case employs a free-location system which takes out an arbitrary available container from a plurality of containers corresponding to the size of a book to be returned, during return operation, to return the book into the container.

Since an arbitrary container can be selected, a front container can be preferentially used as a return container, accordingly. <u>The corrected invention of the case is an idea of an operation to prevent a rear container from being carried out, or further improvement of carry-in/out efficiency by preferentially using a front container from among available containers for return.</u>

In storing two containers in a depth direction, the probability that a target (return) container is located at the back is 1/2, and it requires great time and effort to take out the container. However, in fact, a difference may be larger due to advantages of the free-location system where as many books as possible can be simultaneously returned to a container depending on the size. Therefore, in the free-location system, unless there is combination of two containers in a depth direction, unlike a single container (Evidence A No. 1-3 and Evidence A No. 4 employ a single container), storage efficiency decreases to 1/2, and it is useless in terms of carry-in/out efficiency. Thus, such a storeroom cannot be an automatic storeroom.
Storage efficiency is improved by a method of arranging two containers in a depth direction, which is unprecedented in a book system. The invention <u>established a high level</u> <u>technology of applying free-location technology</u> of updating information on storage of books and containers in order to further improve carry-in/out efficiency, which can be reduced as disadvantages of the above idea, <u>not to a single container in a depth direction</u> <u>but to two containers</u>, with trouble-free operation.

This invention has been <u>completed as a technology of automatic storeroom</u> <u>including improvement in both storage efficiency and carry-in/out efficiency, which are</u> <u>incompatible with each other</u>, not only by applying the free-location system to a configuration of arranging two containers in a depth direction, but also by preferentially selecting a front container in return operation so as not to select a rear container which significantly reduce carry-in/out efficiency, and has led to enormous deployment of the automatic storeroom. The significant improvement in storage capacity and carry-in/out efficiency, which is not disclosed or indicated in any of Invention A-4, Invention A-1-3, or Invention A-5, is a unique effect of the Corrected invention of the case.

# (2-4-3) Judgment by the body

It is a well-known problem, in the field of bookshelf or warehouse, to improve storage efficiency as well as carry-in/out efficiency (the first court decision p. 44 l. 20-l. 22). In view of the problem, the matters specifying the invention of Corrected invention 1 of the case are summarized as follows.

Improvement in storage efficiency can be achieved mainly by the matters specifying the invention of the Corrected invention 1 of the case relating to the Different feature 3 (including the matters specifying the invention of the Corrected invention 1 of the case relating to the Different feature 1) (the first court decision p. 45 the 2nd line from the bottom to p.46 l. 18).

Improvement in carry-in/out efficiency can be achieved by employing the matters specifying the invention of the Corrected invention 1 of the case relating to the Different features 1 and 2 (the first court decision p. 46 l. 22-l. 24).

The description in Corrected invention 1 of the case, "to preferentially use the front container of the two containers stored in the depth direction, as the available container," can

be understood as improvement in carry-in/out efficiency by the matters specifying the invention of the Corrected invention 1 of the case relating to the Different features 3 and 4, including the matters specifying the invention of the Corrected invention 1 of the case relating to the Different features 1 and 2.

Here, we will examine Different feature 4.

As described in the examination on Different feature 3, it is conventional wellknown technical matters in the field of warehouse 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 (Well-known art 2), and the objects to be stored in a shelf space by use of containers in Invention A-4 and Invention A-5 are books or general cargos (hereinafter referred to as "cargos or the like."

Regarding general modes of lending and returning a book and carry in/out a cargo, in light of the Well-known art 2 relating to the above configuration of storing a plurality of containers in a depth direction, in lending and carry-out operations relating to discharging cargos or the like already stored in a container, the desired cargos or the like are discharged definitely regardless of the location thereof in a depth direction. Carry-in/out efficiency can be improved by automating a discharging device. In returning and carry-out operation relating to carrying in cargos or the like, the cargos or the like are stored in an available container. It can be said that a person skilled in the art could inevitably conceive of improving carry-in/out efficiency corresponding to a position of an available container as well as improvement in carry-in/out efficiency based on automation of a discharging device.

When a rear available container is taken out in carry-in operation despite an available front container, it obviously reduces carry-in/out efficiency. In light of the above well-known problem of improving carry-in/out efficiency, it can be said that it is a technical matter to be ordinarily employed by a person skilled in the art in the field of bookshelf or warehouse to preferentially use a front container as an available container.

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

(3) Working effect of Corrected invention 1 of the case 74/82

Regarding the effect of the Corrected invention 1 of the case, efficiency of take-out and returning operation is described in [0089] of the substitute specification as well as the effect of improving storage efficiency. The effect of improving storage efficiency could be predicted by a person skilled in the art on the basis of Invention A-4, Invention A-1, Invention A-5, and Well-known arts 1 and 2 (the first court decision p. 45 the 3rd line from the bottom to p. 46 the 5th line from the bottom).

As described above, Corrected invention 1 of the case could easily achieved by a person skilled in the art, and the effect of improving carry-in/out efficiency could be predicted by a person skilled in the art on the basis of Invention A-4, Invention A-1, Invention A-5, and Well-known arts 1 and 2.

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

## (4) Summary

As described above, the Corrected invention 1 of the case could 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.

## 3-4. 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 as 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.

75 / 82

# (2) Comparison

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

# (Different feature 5)

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, 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 Written demand for trial after correction p. 32 the last line to p. 33 the last line.

Regarding the configuration of Corrected invention 2 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, 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 described in Evidences A No. 5 and No. 6, for example). The pallet corresponds to the container in Corrected invention 2 of the case.

Therefore, since the technology of "including 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 5 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 5 could be 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. 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 Evidences A No. 5 and No. 6 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 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. However, it is not a conventionally well-known technical matter in the technical field of automatic storeroom, at least. Furthermore, 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 easily conceive of Corrected invention 2 of the case.

## (3-3) Judgment by the body

As described in "3-3. (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 "3-1. (5)" in Evidence A No. 5, presented as an example of Well-known art 2, and the 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 [corresponding to the "take-out mechanism" in Corrected invention 2 of the case," "indicating corresponding matters described in the invention of Corrected invention 2 of the case] for taking out a front loading pallet 1A ["front container"] from a shelf space ["shelf area"], and a telescopic fork 3 ["moving mechanism"] for moving a rear loading pallet 1B ["rear container"] to the front (with a holding part 5 for connecting the loading pallet 1B and an engaging part 6 so as to be engaged with each other), and taking out the rear loading pallet 1B ["rear container"], which has been moved to the front by the telescopic fork 3 ["moving mechanism"], with the telescopic fork 3 ["take-out mechanism"] from the shelf space ["shelf area"]."

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

#### (4) Summary

In light of Corrected invention 2 of the case as a whole, the working effect thereof could also be 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 be 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.

### 3-5. 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 as 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 taking out the rear container 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 4, and different also in the following points.

# (Different feature 6)

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 rear container 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 6").

# (3) Examination on Different feature 6

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

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

79 / 82

Regarding the configuration of Corrected invention 3 of the case relating to the Different feature 6, 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 takeout means for selectively taking out and holding a front pallet and 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 described 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 6 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 6 could be 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 6, 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 takeout 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. 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 easily conceive of Corrected invention 3 of the case.

## (3-3) Judgment by the body

As described in "3-3. (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 "3-1. (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 [corresponding to "first and second take-out means" in Corrected invention 3 of the case," "indicating corresponding matters described in the invention of Corrected invention 3 of the case] for selectively taking out a front pallet ["front container"] 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 easily obtain the configuration of Corrected invention 3 of the case relating to Different feature 6, on the basis of Invention A-4, Well-known art 2, and Technology described in A-8.

#### (4) Summary

In light of Corrected invention 3 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, 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 be 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.

### 4. Closing

Corrected inventions 1 to 3 of the case could be easily invented 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 1 to 3 of the case 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.

June 3, 2014

Chief administrative judge: ITO, Asahito Administrative judge: FUJIWARA, Naoyoshi Administrative judge: MAKIHARA, Susumu