of data items carrying the same meaning in a plurality of languages are printed. In this case, the conventional printer device first performs printing of a required number of labels according to preset data indicating the character strings of the respective data items in one language (e.g., English), then rewrites the preset data into preset data for a different language (e.g., French), and further performs printing of a required number of labels according to the latest preset data.

[0004]

Patent Literature 1

Japanese Unexamined Patent Application Publication No. 2001-31039

SUMMARY OF INVENTION

Technical Problem

[0005]

However, according to the conventional printer device, as it is necessary to rewrite preset data that is internally stored every time when a language for character strings to be printed on labels is switched, this switching operation between languages is cumbersome.

[0006]

Embodiments of the present invention~~The present invention is made in view of the above situation, and an object of the present invention is to~~ provide a printer device capable of printing character strings of data items carrying the same meaning in a plurality of languages.

Solution to Problem

[0007]

~~A printer device according to the present invention is capable of printing character strings of data items that have been previously determined respectively for a plurality of fields that are arranged according to a predetermined label format, the printer device including: preset data storing means of storing preset data in which character strings of data items to be printed respectively in the plurality of fields are expressed in a plurality of languages, wherein based on the preset data, the character strings of the data items that have been previously determined respectively for the plurality of fields of the label are printed in one or more languages selected from the plurality of languages.~~According to a first aspect, there is provided a printer device capable of printing character strings of data items that have been previously determined respectively for a plurality of fields that are arranged according to a predetermined label format, the printer device comprising: preset data storing means of storing preset data in which character strings of data items to be printed respectively in the plurality of fields are expressed in a plurality of languages, wherein based on the preset data, the character strings of the data items that have been previously determined respectively for the plurality of fields of the label are printed in one or more languages selected from the plurality of languages and the printer device further comprising: determining means of determining, for each of the plurality of fields in the label, whether to print in the one language or in the more than one language that has been selected from the plurality of languages, wherein according to a result of the

determination by the determining means, the character strings of the data items that have been previously determined respectively for the plurality of fields of the label are printed in the one or more languages selected from the plurality of languages.

[0008]

According to this structure, the preset data in which the character strings of the data items to be printed respectively in the plurality of fields are expressed in the plurality of languages is stored in the preset data storing means. Therefore, by selectively using the character strings of the data items expressed in the one or more languages that are needed from the preset data, it is possible to print the character strings expressed in the one or more languages that are needed respectively in the plurality of fields of the label.

[0009]

Further, for a field for which a character string of a data item is common to the plurality of languages in the preset data, the common character string can be expressed only in a

single language.

[0010]

According to this structure, as there are no overlaps in the data item (e.g., manufacturing date and such) whose character string is common to the plurality of languages in the preset data, this makes a data amount of the preset data smaller. As a result, it is possible to save the capacity of a memory of the printer device.

[0011]

Moreover, according to embodiments of the printer device of the present invention, the preset data supplied externally to the printer device can be stored in the preset data storing means. In this case, the preset data can be provided via a predetermined network in response to a request from the printer device, via a user interface such as an operation unit, or via a recording medium.

[0012]

~~Furthermore, it is possible that the printer device according to the present invention further includes: determining means of determining, for each of the plurality of fields in the label, whether to print in the one language or in the more than one language that have been selected from the plurality of languages, wherein according to a result of the determination by the determining means, the character strings of the data items that have been previously determined respectively for the plurality of fields of the label are printed in the one or more languages selected from the plurality~~

~~of languages.~~

[0013]

According to this structure, it is possible to print, in each field in the label, the character string of the data item that has been previously determined for this field in the one or more languages.

[0014]

According to a second aspect, there is provided a printer system comprising~~A printer system according to the present invention includes~~: one of the printer devices as described above; and a control device connected to the printer device, wherein the control device includes: original preset data acquiring means of acquiring original preset data in which character strings of data items to be printed respectively in a plurality of fields that are arranged according to a predetermined label format are expressed in a plurality of languages; preset data extracting means of extracting preset data from the acquired original preset data, the extracted preset data relating to more than one language necessary for the printer device; and transmitting means of transmitting the extracted preset data relating to the more than one language to the printer device, wherein the printer device stores the preset data relating to the more than one language that has been transmitted from the control device in the preset storing means.

[0015]

According to this structure, only the preset data extracted from the original preset data in which the character strings of the data items to be printed respectively in the

plurality of fields that are arranged according to the predetermined label format are respectively expressed in the plurality of languages, and relating to the more than one language necessary for the printer device is provided for the printer device. Accordingly, the printer device does not have to hold the preset data (original preset data) expressed in all languages. Further, it is possible to update the preset data used by the printer devices respectively in the plurality of printer systems only by collectively updating the original preset data.

[0016]

The control device can be provided separately from the printer device, or can be implemented as a function of the printer device.

[0017]

The original preset data acquiring means can be configured to acquire the original preset data from a recording medium such as a CD-ROM, or to include means of receiving the original preset data transmitted via a predetermined network.

[0018]

Advantageous Effects of Invention

According to embodiments of the printer device of the present invention, by selectively using the character strings of the data items expressed in the one or more languages that are needed from the preset data in which the character strings of the data items to be printed respectively in the plurality of fields are expressed in the plurality of languages, it is possible to print

the character strings expressed in the one or more languages that are needed respectively in the plurality of fields on the label. Therefore, it is not necessary to rewrite the preset data every time changing the language to be used, and it is possible to easily print the character strings of the data items carrying the same meaning in the plurality of languages on the label.

[0019]

Further, according to embodiments of the printer system of the present invention, as the printer device does not have to hold the preset data (original preset data) expressed in all languages, it is possible to reduce the capacity of the memory for storing the preset data in the printer device. Moreover, as it is possible to update the preset data used by the printer devices respectively in the plurality of printer systems only by collectively updating the original preset data in the host system, it is possible to improve the efficiency in the update operation.

[0020]

Furthermore, according to embodiments of the printer system of the present invention, names corresponding to languages of different countries of the same item (e.g., name of product) to be printed carry the same meaning in the original preset data. Therefore, it is possible to issue a label on which, for example, along with the name of the product expressed in Japanese, the name of the product expressed in another language, for example, Korean, is printed by the printer device. Accordingly, it is