# (19) World Intellectual Property Organization International Bureau

tion AIPO

## 

# (43) International Publication Date 28 June 2007 (28.06.2007)

# (10) International Publication Number WO 2007/073294 A1

(51) International Patent Classification: *A47F 5/00* (2006.01) *G09F 3/20* (2006.01)

(21) International Application Number:

PCT/SE2006/001456

(22) International Filing Date:

20 December 2006 (20.12.2006)

(25) Filing Language:

Swedish

(26) Publication Language:

English

(30) Priority Data: 0502867-5

22 December 2005 (22.12.2005) SE

- (71) Applicant (for all designated States except US): HL DIS-PLAY AB [SE/SE]; Horisontvägen 26, S-128 34 Skarpnäck (SE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): SJÖBERG, Mårten [SE/SE]; Frödingsvägen 14, S-112 56 Stockholm (SE). JOSEFSSON, Börje [SE/SE]; Hoppvägen 3, S-860 30 Sörberge (SE).
- (74) Agent: WENNBORG, Johan; Kransell & Wennborg KB, Box 27834, S-115 93 Stockholm (SE).

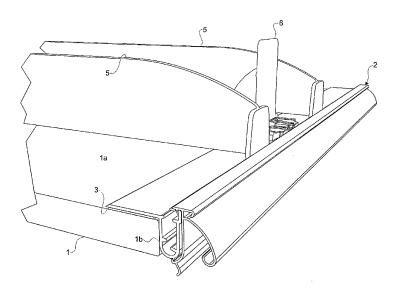
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A DEVICE FOR FIXING ACCESSORIES TO A SHELF



(57) Abstract: A device (2, T) for releasably fixing accessories (5, 6) to a shelf (1), comprising an elongate channel element (10, 10') which is adapted to be fastened to the front edge of a shelf and which includes an axially extending channel (13, 13') for accommodating engagement parts (53) of a number of accessories disposed in juxtaposed relationship along the shelf, and a fixing element (20, 20') which co-acts with the channel element such as to affix the engage¬ ment parts accommodated in the channel element wherein the fixing element (20, 20') can be moved relative to the channel element for adjustment between a fixing mode, in which the engagement parts are fixed, and a release mode in which the engagement parts are released.



2007/073294 A1 IIII

## A DEVICE FOR FIXING ACCESSORIES TO A SHELF

### Field of invention

The present invention relates to a fastening device for releasably fixing accessories to a shelf of the kind defined in the preamble of claim 1. The invention also relates to a system, and a shelf equipped with such a fixing device.

The shelf accessories may be of different kinds, such as for instance shelf dividers, pushing devices, holders for information carriers, trays, etc.

## Background of the invention

Stores that retail convenience goods or commodities on a daily basis often present their goods on shelves. In order to create an ordered display of these goods on the shelving and to enhance their presentation there is used a number of different accessories, such as shelf dividers, different types of devices for pushing the goods and different types of goods-carrying trays, etc. Such accessories are often mounted on the upper surface of the shelf.

- Known technology allows these accessories to be fastened to the shelf in a number of different ways, for instance mechanically with the aid of screws or technically equivalent devices, by frictional engagement or by adhesion with the aid of double-sided adhesive tape or by corresponding means.
- The devices used to fasten the accessories to the shelves will preferably have some fundamental properties. One important property is that it is possible to fasten the accessories at selected positions along the length of the shelving, so as to position the accessories in a chosen space relationship that is adapted to suit different packages and different quantities of goods. The accessories should further be securely held to the shelf in order to avoid that they are inadvertently loosened or displaced from their intended positions.

Shelf dividers constitute an example of accessories where the mutual distance there between can be particularly important. The shelf dividers often consist of partitioning walls which are fastened to the shelving such as to extend at right angles to the longitudinal direction of the



shelving and to project outwardly perpendicularly therefrom. The primary purpose of the shelf dividers is to separate different groups of goods from one another and to create order on the shelving. Particularly when a goods advancing means is placed between two shelf dividers, it is essential that the shelf dividers are not displaced towards one another, not even to the slightest extent, since the friction between goods and shelf dividers may then become so great as to prevent advancement of the goods.

The accessories will preferably also be held firmly, such as to ensure that they will not topple. In conjunction with this, it is highly important will be held firmly and that the fixing device will enable respective accessories to be readily fixed and removed.

A particularly desirable property is that it is possible to fix a number of accessories to the shelf and to release a number of accessories from the shelf readily by hand. A system which allows several accessories to be fixed and released at the same time can be used, for instance, in setting up shelf dividers on a new shelf or in reorganizing the whole of the shelf or a larger part thereof. In setting up shelf dividers on an empty shelf, the shelf dividers are first placed in roughly estimated positions along the shelf, with respect to the goods to be placed thereon. The person responsible for setting up the shelf will normally start at one end of the shelf and work towards the other end thereof. When arriving at the other end of the shelf it may become apparent that there is not sufficient room on the shelf to place a last shelf divider. All of the earlier placed shelf dividers must then be adjusted by displacing the same somewhat in either direction so as to provide space for the last shelf divider so as to fill out the earlier occurring free end of the shelf. In respect to the work involved in making this adjustment it is highly beneficial when the shelf dividers are not fixed to the shelf, so as to avoid the necessity loosening and re-fastening the dividers. When all of the shelf dividers have been finally positioned, it is desirable that all dividers can be fixed simultaneously in their respective positions readily by hand. This will readily ensure that non of the dividers will topple or be displaced or loosened on their respective intended positions while fixating the dividers or when subsequentlly placing goods on the shelf.

Even when the shelf is placed in order and the shelf dividers are placed in their respective positions, it is sometimes necessary to reorganize the shelf, requiring one or more of the shelf dividers to be moved, removed or fixed in position. For example, this is the case when the spacing between two adjacent shelf dividers must be adjusted in order to accommodate a new



5

10

15

20

25

30

item of goods or package of goods of other dimensions. In addition, it may often be desirable to subsequently fasten other accessories, such as information carriers, for instance flag holders or coupon holders on a shelf that has earlier been placed in order. In order to facilitate such reorganization of parts of a shelf that has already been placed in order it is desirable that individual accessories can be removed and then secured in a new position and to affix new accessories without needing to release remaining shelf dividers.

PCT/SE2006/001456

It is also desirable that the means for fixating the accessories will have an aesthetic appearance and will not be an unnecessary obstacle to placing or removing goods on and from a shelf or from adjacent shelving. It is also important that the accessory fixing means are of simple construction and can be produced and mounted at low cost.

It is also desirable that the means for securely holding accessories to a shelf can be applied to existing shelves without requiring the shelves to be replaced or modified in some way.

15

10

5

In addition to the aforesaid accessories that are normally placed on the shelf or shelving there are also often used different types of holders for price labels and other information carriers that refer to the goods place on the shelves.

One example in this respect resides in the data-carrying strips comprised of an elongate profiled element fastened to the front edge of respective shelving such as to extend along the full length of a shelf or along several juxtaposed shelf sections. This data-carrying strip includes a longitudinally extending transparent plastic pocket in which price labels can be placed side by side in front of the goods to which the information carried thereby relates.

25

30

In recent times there has been found wider use for so-called mother profiles or holder profiles, primarily in convenience stores. The mother profiled sections are also comprised of an elongate profiled element which is fastened to the front edge of a shelf along its full length or along mutually juxtaposed sections thereof. Instead of an elongate plastic pocket the mother profiles include an elongate engagement part to which separate plastic pockets for labels or other information-carrying holders, such as flag holders, can be fastened in selective positions along the front edge of the shelf. The use of mother profiles provides greater flexibility and more possibilities for achieving an informative, striking and aesthetically attractive presentation of goods-related information.



## Prior art techniques

5

10

15

20

25

30

WO2004/112549 describes a system for fastening accessories to a shelf. The system includes an accessory which has a foot, and a channel element that has an outwardly open channel. The channel element is comprised of extruded aluminium and is fastened along the front edge of a shelf. A fixing device, for instance in the form of an elongate leaf spring, is disposed in the channel. The fixing device can be adjusted between a fixing position in which the feet of respective accessories accommodated in the channel are fixed and a release position in which said feet are released through the medium of a manoeuvring device accessible from outside the channel.

WO2005/7025386 describes a similar system which comprises a channel element formed by extruded aluminium and having an outwardly open channel which is fastened to the front edge of a shelf for accommodating the feet of respective accessories. An elongate fixing device that has an outwardly open and axially extending groove is provided in the channel and can be adjusted between an accessory fixing position and an accessory released position. This system differs from the known system described above by virtue of the fact that the fixing device can be adjusted between its respective positions by manipulating one of the accessories accommodated in the channel element, among other things.

Both of the known systems described above thus enable all accessories accommodated in the channel to be readily fixed and released respectively by hand. The systems also allow subsequent adjustment of the accessories to be achieved readily when the accessories are located in the channel element and the fixing device is in its accessory release mode.

The design of the systems that include an outwardly open channel in which the feet or corresponding engagement parts of the accessories are accommodated ensures that the accessories will be held stably in their fixed positions and that the accessories will stand relatively firmly on the shelf even in the release mode of the system, so as to facilitate subsequent adjustment of the accessories. Fastening of the accessories in the channel element disposed on the front edge of the shelf also enables the systems to be formed in the absence of parts that project up from the shelving if so desired.



# DOCKET

# Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

# **Real-Time Litigation Alerts**



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## **Advanced Docket Research**



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## **Analytics At Your Fingertips**



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

### **LAW FIRMS**

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

### **FINANCIAL INSTITUTIONS**

Litigation and bankruptcy checks for companies and debtors.

## **E-DISCOVERY AND LEGAL VENDORS**

Sync your system to PACER to automate legal marketing.

