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| (60) Parent Application or Grant ELECTRONIC RETAILING SYSTEMS INTERNATIONAL []; (). SMITH, Maria-Teresa []; (). JANCZYK, Walter, J. []; (). RICHARDSON, James, E. []; (). OPPEDAHL, Carl ; (). | |

(54) Title: PLASTIC SHELF RAILS FOR ELECTRONIC SHELF LABELS AND LOCKING CLIPS FOR ATTACHING SAME TO METAL SHELVES

(54) Titre: RAILS PLASTIQUES D'ETAGERES, DESTINES A DES ETIQUETTES ELECTRONIQUES, ET PINCES DE BLOCAGE SERVANT A FIXER CES ETIQUETTES SUR DES ETAGERES METALLIQUES

(57) Abstract

A means is provided for mounting shelf labels on supermarket shelving with a C-channel (250). Metal shelving is shaped to define a slot extending below the shelf between the flat shelf and the front curved surface, the lower edge of which is shaped to form a return. A metal clip (251) fits into the slot to form a second return opposite the first return. A rail (78) with a bracket (210) and slide (42) engage the first and second returns for mounting shelf labels. Another embodiment is the provision of plastic shelf rails (77) for mounting wireless electronic shelf labels (140). The lower groove of the rail is shaped to engage latches (146) at the bottom of the electronic shelf label which can only be removed by using a special tool. Also provided is a shelf rail (77) made by co-extruding flexible and rigid polyvinyl chloride (PVC) materials. A feature of the plastic shelf rails is a notch on the back to accommodate metal shelf brackets. To prevent the electronic shelf labels (140) from sliding, they are held firmly in place by a gripping pad. Also provided is a plastic shelf rail (76) optimized for lower shelves which tilts the electronic price display upwards so that it is easy to read. Also provided are two transparent plastic covers (70, 71) for the shelf rail, and a plastic shelf rail with integrated cover (74, 52), co-extruded. An additional embodiment is a holder which attaches to a supermarket shelf C-channel for holding the electronic shelf label. A further embodiment of the holder is one for use without shelves which has an adhesive backing (240) for mounting the electronic shelf label.

(57) Abrégé

L'invention concerne des moyens de montage d'étiquettes sur des étagères de supermarché, ces moyens étant dotés d'un profilé en C. L'étagère métallique est conçue pour définir une fente s'étendant en-dessous de l'étagère, entre la partie plate de l'étagère et la surface antérieure courbe de celle-ci, l'extrémité inférieure de cette surface courbe étant conçue pour former un retour. Une pince métallique s'ajuste dans la fente pour former un second retour, opposé au premier. Un rail doté d'un support et d'une glissière s'emboîte sur les premier et second retours, aux fins de montage desdites étiquettes. Dans un autre mode de réalisation, l'invention concerne des rails plastiques d'étagères, destinés au montage d'étiquettes électroniques sans fil. Ces rails sont suffisamment robustes pour que l'on puisse les fixer fermement sur une étagère de supermarché, ils sont capables de résister à l'usage intensif que l'on en fait dans un magasin de détail, et ils sont dotés de tolérances précises pour maintenir fermement en place les étiquettes électroniques et empêcher celles-ci de glisser vers un endroit inadéquat sur l'étagère. En outre, la gorge inférieure du rail est conçue pour s'emboîter sur des dispositifs de blocage, au niveau de la partie inférieure de l'étiquette électronique, assujettissant dans le rail cette étiquette dont l'enlèvement n'est alors possible qu'à l'aide d'un outil spécial. Le blocage sur place des étiquettes électroniques constitue un avantage pour des détaillants, en termes de conformité avec les étagères et de gestion du plan d'ensemble d'un magasin. Ces rails sont également conçus pour recevoir des notices techniques et du matériel promotionnel. L'invention concerne également un rail réalisé par co-extrusion de matériaux souples et rigides à base de polychlorure de vinyle (PVC). Une caractéristique de ces rails plastiques est constituée par une encoche ménagée sur l'arrière du rail, aux fins de réception de supports d'étagère métallique attachant le rail de manière sûre sur le bord de l'étagère. Afin d'empêcher les étiquettes électroniques de glisser, elles sont fermement maintenues en place à l'aide d'un patin de retenue, co-extrudé comme un boudin de PVC souple lié au rail plastique en PVC rigide. L'invention concerne également un rail plastique perfectionné, destiné aux étagères inférieures, ce rail basculant l'affichage électronique du prix vers le haut, de manière à rendre facile la lecture du prix. Ce perfectionnement et les modes de réalisation décrits sont souples d'emploi, de poids léger et moins chers à produire que les rails métalliques classiques. L'invention concerne encore deux couvercles plastiques transparents destinés à ce rail, de préférence co-extrudés, de manière à présenter des nervures souples, afin de constituer une caractéristique de technique marchande destinée à retenir du papier ou des cartes en matière plastique. Une caractéristique additionnelle est constituée par un rail plastique doté d'un couvercle solidaire, co-extrudé avec le rail.

Dans un autre mode de réalisation de l'invention, un support se fixe sur le profilé en C de l'étagère du supermarché, afin de retenir l'étiquette électronique, ce support étant caractérisé en ce qu'il est perfectionné pour que l'on puisse soit l'utiliser sur des étagères à hauteur normale ou basse, soit l'utiliser sans étagère, et en ce qu'il présente un dos adhésif servant au montage de l'étiquette électronique à proximité d'affichages muraux, de zones de production, de tables d'étalage indépendantes, de casiers d'étalage de charcuterie et de viande, de casiers en fil métallique, et d'autres zones de commercialisation.

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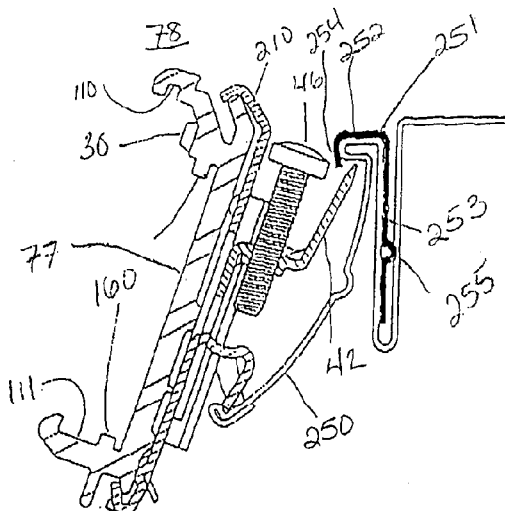
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| <p>(51) International Patent Classification ⁶ : A47F 5/00, G09F 3/18</p> | <p>A3</p> | <p>(11) International Publication Number: WO 99/65288</p> | | | | | | | | | | | | |
| <p>(21) International Application Number: PCT/US99/11574 (22) International Filing Date: 26 May 1999 (26.05.99)</p> | | <p>(43) International Publication Date: 23 December 1999 (23.12.99)</p> <p>(81) Designated States: CA, JP, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).</p> | | | | | | | | | | | | |
| <p>(30) Priority Data:</p> <table border="0"> <tr> <td>60/086,651</td> <td>26 May 1998 (26.05.98)</td> <td>US</td> </tr> <tr> <td>60/086,678</td> <td>26 May 1998 (26.05.98)</td> <td>US</td> </tr> <tr> <td>60/091,402</td> <td>29 June 1998 (29.06.98)</td> <td>US</td> </tr> <tr> <td>09/227,282</td> <td>6 January 1999 (06.01.99)</td> <td>US</td> </tr> </table> | | 60/086,651 | 26 May 1998 (26.05.98) | US | 60/086,678 | 26 May 1998 (26.05.98) | US | 60/091,402 | 29 June 1998 (29.06.98) | US | 09/227,282 | 6 January 1999 (06.01.99) | US | <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 23 March 2000 (23.03.00)</p> |
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| <p>(71) Applicant: ELECTRONIC RETAILING SYSTEMS INTERNATIONAL [US/US]; 488 Main Avenue, Norwalk, CT 06851-1007 (US).</p> <p>(72) Inventors: SMITH, Maria-Teresa; 202 Park Street #4, New Canaan, CT 06840 (US). JANCZYK, Walter, J.; 362 Spelman Highway, Burlington, CT 06013-1605 (US). RICHARDSON, James, E.; 34 Ladder Hill Road South, Weston, CT 06883 (US).</p> | | | | | | | | | | | | | | |
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(57) Abstract

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US99/11574

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(6) : A47F 5/00; G09F 3/18
 US CL : 211/153; 40/661.03, 651; 248/231.21
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 211/153, 135; 40/661.03, 651, 661, 647,648, 642.02, 655, 657; 248/231.21; 29/428; 103/27, 28; 428/98

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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Further documents are listed in the continuation of Box C. See patent family annex.

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| A, E, T | US 6,000,611 A (DALTON et al) 14 December 1999 (14/12/99), see entire document. | 1-37 |