



(11) **EP 3 089 143 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**02.11.2016 Bulletin 2016/44**

(51) Int Cl.:  
**G09F 15/00** <sup>(2006.01)</sup>

(21) Application number: **16167703.4**

(22) Date of filing: **29.04.2016**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB  
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO  
PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**  
Designated Validation States:  
**MA MD**

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(30) Priority: **30.04.2015 CN 201520281746 U**

(27) Previously filed application:  
**30.04.2015 CN 201520281746 U**

(54) **A BANNER STAND WITH IMPROVED STRUCTURE**

(57) This utility model releases a banner stand with improved structure, which includes the standing posts and the main unit of the banner stand, wherein the main unit of the said banner stand is firmly connected to the bottom end of the standing posts. This said banner stand with improved structure also includes the support leg, which is set on the back of the base of the main unit of the banner stand and connected to the base of the main unit of the banner stand with a turning device and can be turned along the main unit of the banner stand. When the support leg is axially perpendicular to the main unit of the banner stand, the support leg and the main unit of

the banner stand are firmly connected by fixing them together with a snap fastening mechanism; and this snap fastening mechanism includes a mutually fitting snap slot and snap fastener. This snap slot is set on the support leg, and the snap fastener is set on the main unit of the banner stand. This utility model has a stable and reasonable structure, is highly stabile, and has a firm connection between the main unit of the banner stand and the standing posts, and when being displayed, it always remains vertical for an outstanding picture display effect. It can be used to display a wide range of advertisements with very promising manners of applications.

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## Description

### Technology

[0001] This utility model involves a banner stand, a specialty roll-up banner stand for advertisements, commercial promotion, etc., which falls into the field of advertisement banner stand.

### Background

[0002] As a means for modern business promotion, this banner stand has a simple structure and intuitive appearance, and can therefore be widely used and favoured in the industry.

[0003] Normally, a banner stand mainly includes the standing posts and the main unit of the banner stand. The advertisement canvas is set in the main unit of the banner stand. During use, the standing posts are used to support the main unit of the banner stand and the advertisement canvas is then pulled out of the main unit of the banner stand and stretched for display. However, there is no support leg on the bottom of the main unit of the banner stand, or the support leg cannot be connected, so during use, stability is poor and the banner stand may vibrate, and the display effects of the picture is affected.

[0004] On the basis of such considerations, the provision of a banner stand with a stable structure, a firm connection between the main unit of the banner stand and the standing posts, and an outstanding display effect have become the objective of research and development in the industry.

### Contents of the utility model

[0005] To solve the aforementioned technical issues, this utility model is designed to provide a banner stand with improved structure. It has a stable and reasonable structure, is highly stabile, and has a firm connection between the main unit of the banner stand and the standing posts. During display, it always remains vertical to provide an outstanding picture display effect.

[0006] For the aforementioned objectives, the following technical solutions are used for this utility model:

[0007] The banner stand with improved structure includes the standing posts and the main unit (main body) of the banner stand, wherein the main unit of the said banner stand is firmly (fixedly) connected to the bottom end of the standing posts. The banner stand with improved structure also includes the support leg (a supporting foot), which is set on the back of the base of the main unit of the banner stand and connected to the base of the main unit of the banner stand with a turning device (a rotating device) that can be turned along the main unit of the banner stand. When the support leg is axially perpendicular to the main unit of the banner stand, the support leg and the main unit of the banner stand are firmly connected by fixing them together with a snap fastening

mechanism (snap-fit mechanism);

[0008] The snap fastening mechanism includes the mutually fitting snap slot and snap fastener wherein the snap slot is set on the support leg, and the snap fastener is set on the main unit of the banner stand.

[0009] As one of the optimal embodiments for this utility model, the support leg includes the main unit of the support leg and both ends of the bottom of the main unit of the support leg have the first extension part and the second extension part, respectively. The first extension part extends from one end of the main unit of the support leg toward the centre position and has a gap from the bottom end surface that forms the snap slot. The second extension part extends in the same direction as the first extension part.

[0010] As one of the optimal embodiments for this utility model, the snap fastener is a hooked part (hook-like component) that protrudes from the base of the main unit of the banner stand.

[0011] Furthermore, the snap fastener is inserted into the snap slot and is connected to the first extension part for firm connection between the main unit of the banner stand and the support leg.

[0012] As one of the optimal embodiments for this utility model, the turning device is set in the centre position of the connection between the main unit of the banner stand and the support leg.

[0013] Another optimal embodiment is the picture banner, which is set in the main unit of the banner stand and there is an opening on the front end surface of the main unit of the banner stand that is used to pull out the picture banner (advertising picture).

[0014] More specifically, there is also a screw opening on the main unit of the banner stand that is used to create a firm connection between the standing post with a screw.

[0015] For better embodiment, the banner stand with improved structure is made of aluminium alloy.

[0016] Compared with existing technology, this utility model has, at a minimum, the following beneficial effects:

[0017] This utility model has a stable and reasonable structure, is highly stabile, and has a firm connection between the main unit of the banner stand and the standing posts. When being displayed, it always remains vertical for an outstanding picture display effect. It can be used for display of a wide range of advertisements, with very promising manners of applications.

### Figures

[0018] For a clearer explanation of the structure features and technical highlights of this utility model, figures and specific embodiments are given below for a detailed explanation of this utility model.

Figure 1 is the structural drawing for one optimal embodiment of this utility model where the base of the main unit of the banner stand and the support leg are connected;

Figure 2 is the structural drawing of the snap fastener on the base of the main unit of the banner stand in the embodiment;

Figure 3 is the sectional structural drawing of the support leg in the embodiment.

**[0019]** Part names in the figures: 1. Base of the main unit of the banner stand; 10. Snap fastener; 2. Main unit of one support leg; 20. One snap slot; 21. One first extension part; 22. One second extension part.

#### Specific embodiment

**[0020]** In the following section, the figures and one typical embodiment are combined to further describe the technical solution for this utility model.

**[0021]** The banner stand with improved structure in this embodiment is made of aluminium alloy, which includes the standing post and the main unit of the banner stand. The main unit of the banner stand is firmly connected to the bottom end of the standing post, and there is also a screw opening on the main unit of the banner stand that is used to firmly connect to the standing post with a screw. The banner stand with improved structure also includes the support leg. The support leg is set on the back of the base of the main unit of the banner stand and connected to the base of the main unit of the banner stand with a turning device. This turning device is set in the centre position of the connection between the main unit of the banner stand and the support leg. The support leg can be turned along the main unit of the banner stand, and when the support leg is axially perpendicular to the main unit of the banner stand, the support leg and the main unit of the banner stand are firmly connected by fixing them together with a snap fastening mechanism.

**[0022]** As shown in Figure 1, the snap fastening mechanism includes the mutually fitting snap slot (20) and the snap fastener (10), wherein the snap slot (20) is set on the support leg, and the snap fastener (10) is set on the base (1) of the main unit of the banner stand for a firm connection of the support leg and the main unit of the banner stand.

**[0023]** As shown in Figure 2, the support leg includes the main unit (2) of the support leg. Both ends of the bottom of the main unit (2) of the support leg have the first extension part (21) and the second extension part (22) respectively. The first extension part (21) extends from one end of the main unit (2) of the support leg toward the centre position and has a gap from the bottom end surface to form the snap slot (20). The second extension part (22) extends in the same direction as the first extension part (21).

**[0024]** As shown in Figure 3, the snap fastener (10) is a hooked part that protrudes from the base (1) of the main unit of the banner stand. The snap fastener (10) is inserted into the snap slot (20), and is connected to the first extension part (21) to form a firm connection between the main unit of the banner stand and the support leg.

**[0025]** The advertisement picture is set in the main unit of the banner stand, and there is an opening on the front end surface of the main unit of the banner stand that is used to pull out the picture banner.

**[0026]** Working principle of this embodiment: When the picture banner needs to be displayed, the picture banner is pulled out from the opening on the main unit of the banner stand and the support leg is turned so that it is perpendicular to the base of the main unit of the banner stand. The snap slot and the snap fastener fit with each other to form a firm connection between the main unit of the banner stand and the standing post so that it always remains vertical when being displayed for an outstanding picture display effect.

**[0027]** To sum up, this utility model has a stable and reasonable structure and is highly stabile. It can be used to display a wide range of advertisements and has very promising manners of applications.

**[0028]** The above embodiment is only used to explain the technical concepts and features of this utility model to better familiarize professionals with this technology and understand the contents of this utility model and carry out implementations. However, it is not limited to the range of patent protection for this utility model, and any equivalent change or modification based on the rationale in this utility model shall be covered in the range of patent protection for this utility model.

#### Claims

1. A banner stand with improved structure comprising posts and a main body of the banner stand which is fixedly connected to a lower end of the posts, **characterized in that**, the banner stand with improved structure further comprises a supporting foot which is arranged behind a base of the main body of the banner stand and connected thereto through a rotating device, and which is rotatable along the main body of the banner stand, the supporting foot is fixedly connected with the main body of the banner stand through a snap-fit mechanism when the supporting foot is perpendicular to an axial direction of the main body of the banner stand;  
the snap-fit mechanism comprises a snap slot and a snap fastener which are mutually fitted, wherein the snap slot is arranged in the supporting foot and the snap fastener is arranged on the base of the main body of the banner stand.
2. The banner stand with improved structure according to claim 1, **characterized in that**, the supporting foot comprises a main body of the supporting foot, a bottom portion of which is provided with a first extension portion and a second extension portion at both ends respectively, the first extension portion extends from an end portion toward a center portion of the main body of the supporting foot and creates a gap with

a bottom end surface to form the snap slot, the second extension portion extends in the same direction as the first extension portion.

3. The banner stand with improved structure according to claim 1 or 2, **characterized in that**, the snap fastener is a hook-like component which protrudes from the base of the main body of the banner stand. 5
  
4. The banner stand with improved structure according to claim 3, **characterized in that**, the snap fastener is inserted into the snap slot and fitted with the first extension portion so as to fixedly connect the main body of the banner stand with the supporting foot. 10
  
5. The banner stand with improved structure according to claim 1, **characterized in that**, the rotating device is located centrally at a connection of the main body of the banner stand with the supporting foot. 15
  
6. The banner stand with improved structure according to claim 1, **characterized in that**, an advertising picture is disposed in the main body of the banner stand, and a front end surface of the main body of the banner stand is provided with an opening portion for pulling out the advertising picture. 20 25
  
7. The banner stand with improved structure according to claim 1, **characterized in that**, the main body of the banner stand is further provided with a screw opening to be fixedly connected with the posts through a screw. 30
  
8. The banner stand with improved structure according to claim 1, 2, 4, 5, 6 or 7, **characterized in that**, the banner stand with improved structure is made of aluminum alloy. 35

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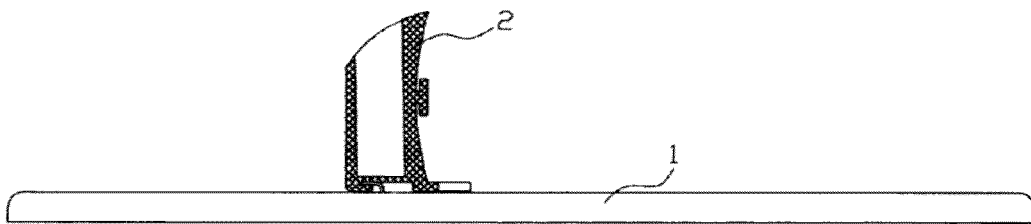


Figure 1



Figure 2

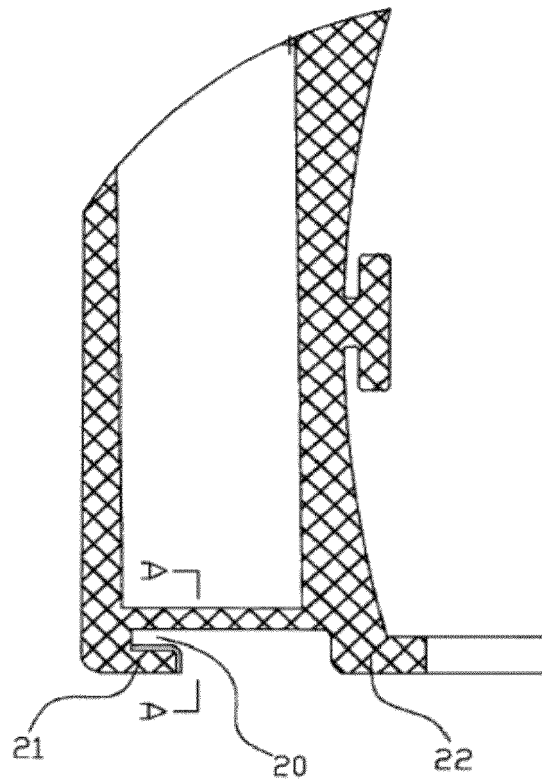


Figure 3



## EUROPEAN SEARCH REPORT

Application Number  
EP 16 16 7703

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 598 840 B1 (SIEGL GEORG [AT]) 29 July 2003 (2003-07-29)	1,3,5-8	INV. G09F15/00
A	* column 6, line 29; figures 1-8b * * column 7, lines 45-59 * -----	2,4	
A	US 6 873 458 B1 (BAKKOM JEFFREY SCOTT [US] ET AL) 29 March 2005 (2005-03-29) * abstract; figures 2-5 * -----	1-8	
A	US 2010/180481 A1 (PARIZEK SCOTT [US] ET AL) 22 July 2010 (2010-07-22) * abstract; figures 1a-1c * -----	1-8	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			G09F
Place of search		Date of completion of the search	Examiner
The Hague		16 September 2016	Demoor, Kristoffel
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 16 16 7703

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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16-09-2016

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6598840 B1	29-07-2003	AT 2756 U1	25-03-1999
		AT 210329 T	15-12-2001
		AU 3802199 A	29-11-1999
		DE 59900503 D1	17-01-2002
		EP 1078348 A1	28-02-2001
		GB 2350468 A	29-11-2000
		US 6598840 B1	29-07-2003
		WO 9959121 A1	18-11-1999
-----			
US 6873458 B1	29-03-2005	US 6873458 B1	29-03-2005
		WO 2006019813 A2	23-02-2006
-----			
US 2010180481 A1	22-07-2010	NONE	
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EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82