

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 1 193 670 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:

06.05.2004 Bulletin 2004/19

(51) Int Cl.7: **G09F 15/00**, G09F 7/18

(21) Application number: **99201437.3**

(22) Date of filing: **29.10.1999**

(54) **Infoboard and assembly of such infoboard and a portal crane truck**

Anzeigetafel und Einheit aus einer solcher Anzeigeeinheit und einer Portalkranlastwagen

Panneau d'affichage et assemblage d'un tel panneau d'affichage et d'une grue-portail

(84) Designated Contracting States:

**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**

• **Kemperman, Jan**

6851 KH Huissen (NL)

• **Klaassen, Theodorus Hermanus**

6851 ED Huissen (NL)

(43) Date of publication of application:

03.04.2002 Bulletin 2002/14

(74) Representative:

Prins, Adrianus Willem, Mr. Ir. et al

Vereenigde,

Nieuwe Parklaan 97

2587 BN Den Haag (NL)

(73) Proprietor: **Bordbusters B.V. i.o.**

6851 EM Huissen (NL)

(72) Inventors:

• **Heijting, Eric Cornelis Johannes Hendrikus**
6932 KE Westervoort (NL)

• **Hubers, Alexander Richardus Maria**
6851 GL Huissen (NL)

(56) References cited:

WO-A-90/11590

DE-A- 19 520 018

FR-A- 2 730 254

GB-A- 2 308 913

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 1 193 670 B1

Description

[0001] The invention relates to an infoboard according to the preamble of claim 1.

[0002] The German Offenlegungsschrift DE 195 20 018 discloses a display column which is attached to a concrete base. The display column can be put down anywhere for a short time. Batteries are provided in the lower part of the column for stability. The column comprises four side walls providing four display panels. This display column can, for example be used as a traffic sign.

[0003] Infoboards having at least one board part intended for an imprint, the infoboard comprising a frame carrying the at least one board part, are, for instance, used at building projects to indicate who the principal, the contractor, the architect and/or the project developer of the building project is. Other data are often also mentioned on such boards, and sometimes an image of the project is shown. These known infoboards therefore have considerable dimensions, a board surface of 3 x 3 m constituting a standard

[0004] The invention provides an infoboard which is characterised by the features of claim 1.

[0005] Through the presence of the base the board can be directly placed on the ground area without digging being required. Moreover, the frame with the board parts fastened thereon is already assembled so that it is not necessary to still fasten the board parts on the frame. In assembled condition the infoboard can be placed at the destination by means of a lifting crane. Because the base has such a weight that the infoboard is only movable by means of a lifting crane, there is no risk that unauthorised persons will take away the board.

[0006] The French Patent application FR 2 730 254 shows a mobile support for a display board, the support being operable by hand. The support comprises a first frame and a second frame being pivotally connected to each other, the first frame serving as a base and the second frame serving as a stand.

[0007] According to a further elaboration of the invention it is very favourable if the base and/or the frame are/ is provided with fastening means for fastening lifting means of a lifting crane thereto.

[0008] It may be clear that the large dimensions of the infoboards can give problems during road transport owing to the height of the board. As is known, vehicles are not allowed to be higher than 4 m. The infrastructure, such as for instance flyovers, is designed for such a maximum height.

[0009] According to a further elaboration of the invention it is very favourable if the frame is provided with a hinge structure with a substantially horizontal swinging axis, the hinge connecting an upper part of the frame with a lower part. Through the presence of the hinge structure an infoboard of considerable height can be designed. Nevertheless, road transport is possible because the height of the board can be reduced by folding

the upper part.

[0010] The invention also relates to an assembly of an infoboard according to the invention and a portal crane truck, the dimensions of the infoboard and the portal crane truck being adjusted to each other such that in the folded condition of the infoboard the assembly has a height less than or equal to 4 m. With such an assembly the infoboard can be readily transported over the road and placed by the portal crane at the desired destination.

[0011] Further elaborations of the invention are described in the subclaims and will hereinafter be explained in more detail, with reference to a practical example.

Fig. 1 is a front view of a practical example of the infoboard according to the invention;

Fig. 2 is a side view of the practical example shown in Fig. 1;

Fig. 3 is a top plan view of the practical example shown in Fig. 1.

[0012] The practical example shown has a board part B shown in Fig. 1 in dashed lines so that the frame structure is visible. The board part B is intended for an imprint. Furthermore, the infoboard comprises a frame 1, 2, which near an underside is firmly connected with a base 4. The base 4 has such a weight that the infoboard is only movable by means of a lifting crane. In the present practical example the base 4 is therefore provided with fastening means 5 for fastening lifting means of a lifting crane thereto. The base is made of concrete and has a length of about 300 cm and a width of about 180 cm. Near the corners the concrete base 4 is provided on the underside with a bearing surface 12 so that the base assumes a stable position on any ground. The fastening means 5 are designed as four pins 5 provided at the free end with a thickening. As a result of the presence of this thickening, the lifting means of the lifting crane are prevented from slipping off the pins. Each vertical longitudinal wall of the base 4 has such a pin 5 provided near each end of the longitudinal wall.

[0013] The upper surface of the concrete base 4 is provided with four fastening points 14 to which the frame 1, 2 is fastened.

[0014] As clearly visible in Fig. 2, the frame 1, 2 is provided with a hinge structure 3 with a substantially horizontal swinging axis. The hinge 3 connects an upper part 1 of the frame with a lower part 2. The board part B also comprises an upper part B1 and a lower part B2. The upper board part B1 is connected with the upper part 1 of the frame, while the lower board part B2 is connected with the lower part 2 of the frame. As a result of the presence of the hinge 3, the infoboard can assume a folded and an unfolded condition. In the folded condition transport of the board on, for instance, a portal crane truck is possible without any inconvenience.

[0015] Since the upper part 1 of the frame and the up-

per board part B1 fastened thereto have a considerable weight, the hinge structure is provided with an energised piston/cylinder assembly 6 and a shore 7, 8, 8'. The shore comprises two shore parts 7, 8 telescopically slidable with respect to each other. The shore part 8, 8' pointing towards the at least one board part B include a shore hinge 9 with a swinging axis extending substantially in the horizontal direction. The shore 8 is provided with a first and a second locking means 10, 11, designed as locking pins, so that in the unfolded condition both the shore parts 7, 8 telescopically movable with respect to each other and the shore hinge 9 can be locked. Preferably, the hinge 3 connecting the upper part 1 and the lower part 2 of the frame together further comprises a locking pin 13. In Fig. 2 the unfolded position of the board is shown in full lines, while the folded position is shown in dashed lines. Clearly visible is the manner in which the positions of the shore parts 7, 8, 8' and the frame parts 1, 2 have changed with respect to each other.

[0016] In order to prevent unauthorised persons from removing the locking pins and bringing the board from the unfolded position into the folded position, the energised piston/cylinder assembly 6 is of removable design. After the infoboard has been brought into the unfolded condition and the locking pins 10, 11, 13 have been placed, the piston/cylinder assembly 6 is removed so that it can no longer be folded by unauthorised persons. The piston/cylinder assemblies 6 can be energised with, for instance, a separate hydraulic 24-volt unit, which is commercially available as a standard.

[0017] From the top plan view shown in Fig. 3 it clearly follows that the concrete base 4 is provided on an upper surface with four fastening points 14 to which the frame 1 is fastened. The board parts B1, B2 can be very rapidly mounted by means of special U sections. In this way boards of different dimensions can be readily placed. It is preferred that on the transverse walls extending perpendicularly to the longitudinal walls the base is provided with coupling means so that a number of infoboards can be placed side by side to carry a larger board.

[0018] The infoboard shown herein can be transported on a standard portal crane truck. In the folded condition the height of the assembly of the portal crane truck and the infoboard will not exceed 4 m. The portal crane trucks are, for instance, known for the transport of open waste containers often used for building projects.

[0019] It is self-evident that the invention is not limited to the described practical example, but that diverse modifications are possible within the scope of the invention, as defined by the set of appended claims.

Claims

1. An infoboard having at least one board part (8) intended for an imprint, the infoboard comprising a frame (1, 2) carrying the at least one board part (B),

wherein near an underside the frame (1, 2) is firmly connected with a base (4), **characterised in that** the base (4) has such a weight that the infoboard is only movable by means of a lifting crane, wherein the base (4) and/or the frame (1, 2) are/is provided with fastening means (5) for fastening lifting means of a lifting crane thereto.

2. An infoboard according to claim 1, **characterised in that** the frame (1, 2) is provided with a hinge structure (3) with a substantially horizontal swinging axis, the hinge (3) connecting an upper part (1) of the frame with a lower part (2).

3. An infoboard according to claim 2, **characterised in that** the hinge structure is provided with an energised piston/cylinder assembly (6) and a shore (7, 8, 8'), the shore comprising two shore parts (7, 8, 8') telescopically slidable with respect to each other, the shore part (8, 8') pointing towards the at least one board part (8) including a shore hinge (9) with a swinging axis extending substantially in the horizontal direction, at least a first and a second locking means (10, 11) being provided so that in the unfolded condition both the shore parts (7, 8) telescopically movable with respect to each other and the shore hinge 9 can be locked.

4. An infoboard according to claim 3, **characterised in that** the energised piston/cylinder assembly (6) is removable.

5. An infoboard according to any of the preceding claims, **characterised in that** the base (4) is made of concrete.

6. An infoboard according to any of the preceding claims, **characterised in that** the base (4) has a length of ca. 300 cm and a width of ca. 180 cm.

7. An infoboard according to claim 5, **characterised in that** a bearing surface (12) is provided in the concrete base (4) near each corner thereof.

8. An infoboard according to at least claims 1 and 5, **characterised in that** the fastening means (5) comprise four pins (5) provided at the free end with a thickening, on each vertical longitudinal wall of the base (4) such a pin (5) being provided near each end of the longitudinal wall.

9. An infoboard according to at least claim 5, **characterised in that** the concrete base (4) is provided on an upper surface with four fastening points (14) to which the frame (1, 2) is fastened.

10. An assembly of an infoboard according to any of the preceding claims and a portal crane truck, the di-

mensions of the infoboard and the portal crane truck being adjusted to each other such that in the folded condition of the infoboard the assembly has an overall height less than or equal to 4 m.

Patentansprüche

1. Anzeigetafel mit mindestens einem Tafelteil (B), das für einen Aufdruck bestimmt ist, die einen Rahmen (1, 2) aufweist, der das mindestens eine Tafelteil (B) trägt, wobei in der Nähe einer Unterseite der Rahmen (1, 2) fest mit einem Sockel (4) verbunden ist, **dadurch gekennzeichnet, dass** der Sockel (4) eine solche Masse hat, dass die Anzeigetafel nur mit Hilfe eines Hebekrans bewegt werden kann, wobei der Sockel (4) und/oder der Rahmen (1, 2) mit Befestigungsmitteln (5) zum Befestigen von Hebe-
mitteln eines Hebekrans versehen ist/sind.
2. Anzeigetafel nach Anspruch 1, **dadurch gekennzeichnet, dass** der Rahmen (1, 2) mit einer Drehgeienkonstruktion (3) mit einer im Wesentlichen horizontalen Schwenkachse versehen ist, wobei das Drehgelenk (3) ein Oberteil (1) des Rahmens mit einem Unterteil (2) verbindet.
3. Anzeigetafel nach Anspruch 2, **dadurch gekennzeichnet, dass** die Schwenkkonstruktion mit einer mit Strom versorgten Kolben-Zylinder-Gruppe (6) und einer Strebe (7, 8, 8') versehen ist, wobei die Strebe zwei Strebenteile (7, 8, 8') aufweist, die teleskopartig gegeneinander verschiebbar sind, wobei das Strebenteil (8, 8') auf das mindestens eine Tafelteil (B) gerichtet ist, das ein Streben-Drehgelenk (9) mit einer im Wesentlichen in horizontaler Richtung verlaufenden Schwenkachse aufweist, wobei mindestens ein erstes und ein zweites Verriegelungsmittel (10, 11) so vorgesehen sind, dass im auseinandergeklappten Zustand beide teleskopartig gegeneinander verschiebbaren Strebenteile (7, 8) und das Streben-Drehgelenk (9) verriegelt werden können.
4. Anzeigetafel nach Anspruch 3, **dadurch gekennzeichnet, dass** die mit Strom versorgte Kolben-Zylinder-Gruppe (6) demontierbar ist.
5. Anzeigetafel nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Sockel (4) aus Beton besteht.
6. Anzeigetafel nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Sockel (4) eine Länge von ca. 300 cm und eine Breite von ca. 180 cm hat.
7. Anzeigetafel nach Anspruch 5, **dadurch gekenn-**

zeichnet, dass in dem Betonsockel (4) in der Nähe jeder seiner Ecken eine Auflagefläche (12) vorgesehen ist.

8. Anzeigetafel nach mindestens den Ansprüchen 1 und 5, **dadurch gekennzeichnet, dass** die Befestigungsmittel (5) vier Bolzen (5) aufweisen, die an dem freien Ende mit einer Verdickung versehen sind, wobei an jeder vertikalen Längswand des Sockels (4) ein solcher Bolzen (5) in der Nähe jedes Endes der Längswand vorgesehen ist.
9. Anzeigetafel wenigstens nach Anspruch 5, **dadurch gekennzeichnet, dass** der Betonsockel (4) an einer Oberseite mit vier Befestigungspunkten (14), an denen der Rahmen (1, 2) befestigt ist, versehen ist.
10. Anordnung aus einer Anzeigetafel nach einem der vorhergehenden Ansprüche und einem Portalkranwagen, wobei die Abmessungen der Anzeigetafel und des Portalkranwagens so aufeinander abgestimmt sind, dass die Anordnung im zusammengeklappten Zustand der Anzeigetafel eine Gesamthöhe von weniger als oder gleich 4 m hat.

Revendications

1. Panneau d'informations comportant au moins une partie de panneau (B) destinée à une impression, le panneau d'informations comportant une structure (1, 2) supportant la au moins une partie de panneau (B), où à proximité d'une surface inférieure, la structure (1, 2) est fermement reliée à une base (4), **caractérisé en ce que** la base (4) a un poids tel que le panneau d'informations est uniquement déplaçable au moyen d'une grue de levage, où la base (4) et/ou la structure (1, 2) sont munies/est munie de moyens de fixation (5) destinés à fixer le moyen de levage d'une grue de levage à ceux-ci.
2. Panneau d'informations selon la revendication 1, **caractérisé en ce que** la structure (1,2) est munie d'une structure d'articulation (3) comportant un axe d'oscillation pratiquement horizontal, l'articulation (3) reliant une partie supérieure (1) de la structure à une partie inférieure (2).
3. Panneau d'informations selon la revendication 2, **caractérisé en ce que** la structure d'articulation est munie d'un ensemble de piston/cylindre activé (6) et d'un étau (7, 8, 8'), l'étau comprenant deux parties d'étau (7, 8, 8') pouvant coulisser de façon télescopique l'une par rapport à l'autre, la partie d'étau (8, 8') étant dirigée vers la au moins une partie de panneau (B), comprenant une articulation d'étau (9) présentant un axe d'oscillation s'étendant pratique-

ment dans la direction horizontale, au moins un premier et un second moyens de blocage (10, 11) étant prévu de sorte que dans la condition dépliée, les deux parties d'étau (7, 8) mobiles de façon télescopique l'une par rapport à l'autre et l'articulation d'étau (9) peuvent être bloquées. 5

4. Panneau d'informations selon la revendication 3, **caractérisé en ce que** l'ensemble de piston/cylindre activé (6) est amovible. 10
5. Panneau d'informations selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la base (4) est constituée de béton. 15
6. Panneau d'informations selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la base (4) présente une longueur d'environ 300 cm et une largeur d'environ 180 cm. 20
7. Panneau d'informations selon la revendication 5, **caractérisé en ce qu'une** surface d'appui (12) est prévue dans la base de béton (4) à proximité de chaque coin de celle-ci. 25
8. Panneau d'informations selon au moins les revendications 1 et 5, **caractérisé en ce que** les moyens de fixation (5) comprennent quatre broches (5) munies au niveau de l'extrémité libre d'un épaississement, sur chaque paroi longitudinale verticale de la base (4), une telle broche (5) étant disposée à proximité de chaque extrémité de la paroi longitudinale. 30
9. Panneau d'informations selon au moins la revendication 5, **caractérisé en ce que** la base de béton (4) est munie sur une surface supérieure de quatre points de fixation (14) auxquels la structure (1, 2) est fixée. 35
10. Ensemble constitué d'un panneau d'informations selon l'une quelconque des revendications précédentes et d'un camion-grue à portique, les dimensions du panneau d'informations et du camion-grue à portique étant ajustées les unes par rapport aux autres de sorte que dans l'état plié du panneau d'informations, l'ensemble présente une hauteur globale inférieure ou égale à 4 m. 40
45

50

55

