

## DESCRIPTION

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### A STAR-SHAPED ASSEMBLY FOR A GLASS CURTAIN WALL

#### TECHNICAL FIELD

- 5        The utility model relates to the technical field of building materials, in particular to a star-shaped assembly used for constructing a glass curtain wall.

#### BACKGROUND

- More and more existing buildings are constructed by using glass curtains,  
10    and these glass curtains can be fashioned into different shapes. One of methods includes: connecting brackets with other brackets to form a star shape; and then connecting other brackets to assemble a glass curtain. However, the star-shaped assembly is formed by using a hollow metal or is formed by welding metal panels manually. Each arm forming the star-shaped assembly is of a hollow  
15    structure inside. As existing buildings are variable in shape, the construction period is delayed and the cost is increased as the connecting position is inaccurate during construction due to the fact that a hollow assembly formed by welding is prone to deformation and displacement.

#### 20    SUMMARY

In order to overcome deficiencies in the prior art, the objective of the utility model is to provide a precise star-shaped assembly for a glass curtain wall.

In order to realize the objective, a technical scheme adopted by the utility model is as follows: a star-shaped assembly for a glass curtain wall includes two

cross-connected oblique arms, and a transverse arm that is connected with the two oblique arms and is intersected with the oblique arms at a same point, where the oblique arms and the transverse arm are solid, and two ends of the oblique arms and the transverse arm are both provided with connecting joints. The

5 star-shaped assembly is manufactured by a Computer Numerical Control (CNC) cutting machining process. The oblique arms and the transverse arm are solid, so that the strength of the assembly is improved. The star-shaped assembly is not prone to deformation in construction. The star-shaped assembly can be accurately machined according to required mounting dimensions, thereby, it is convenient to

10 mount the star-shaped assembly, and the mounting time and the construction cost are saved.

Preferably, the two oblique arms and the transverse arm are formed integrally, the sections of the oblique arms and the transverse arm are square, and widths and heights of the joints arranged on the end portions of the oblique arms

15 and the transverse arm are smaller than widths and heights of the corresponding oblique arms and the transverse arm. The objective of arranging the joints lies in that the brackets and the joints can be welded together when it is necessary to arrange the brackets to extend the star-shaped assembly, so that it is convenient to construct.

20 Preferably, a larger opposite angle formed by the two oblique arms is equally divided by the transverse arm.

Preferably, the star-shaped assembly formed by the two oblique arms and the transverse arm is cut by a CNC machine tool.

The utility model has the beneficial technical effects that the oblique arms and the transverse arm are solid, so that the strength of the assembly is improved. The star-shaped assembly is not prone to deformation in construction. The star-shaped assembly can be accurately machined according to required mounting dimensions, thereby, it is convenient to mount the star-shaped assembly, and the mounting time and the construction cost are saved.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a front view of the utility model.

Fig. 2 is a schematic diagram of another form of the utility model.

#### DETAILED DESCRIPTION

In order to make those skilled in the art better understand the scheme of the utility model, further description in detail on the utility model will be made below in combination with drawings and implementation modes.

As shown in Fig. 1, the star-shaped assembly for a glass curtain wall includes two cross-connected oblique arms 1, and a transverse arm 2 that is connected with the two oblique arms and is intersected with the oblique arms at a same point, where the oblique arms 1 and the transverse arm 2 are solid, and two ends of the oblique arms 1 and the transverse arm 2 are both provided with connecting joints 3.

The two oblique arms 1 and the transverse arm 2 are formed integrally, so that the strength of the star-shaped assembly is improved and it is convenient to machine. The sections of the oblique arms 1 and the transverse arm 2 are square, and widths and heights of the joints 3 arranged on the end portions of the oblique

arms and the transverse arm are smaller than widths and heights of the corresponding oblique arms 1 and the transverse arm 2, and it is convenient to connect the extending bracket. The objective of arranging the joints lies in that the brackets and the joints 3 can be welded together when it is necessary to  
5 connect other brackets to extend the star-shaped assembly, so that it is convenient to construct.

A larger opposite angle formed by the two oblique arms 1 is equally divided by the transverse arm 2. Therefore, the star-shaped assembly is an axisymmetric assembly integrally.

10 The star-shaped assembly formed by the two oblique arms 1 and the transverse arm 2 is cut by a CNC machine tool.

The star-shaped assembly is manufactured by a CNC machine tool cutting process. The oblique arms 1 and the transverse arm 2 are solid, so that the strength of the assembly is improved. The star-shaped assembly is not prone to  
15 deformation in construction. The star-shaped assembly can be accurately machined according to required mounting dimensions, thereby, it is convenient to mount the star-shaped assembly, and the mounting time and the construction cost are saved.

As shown in Fig. 2, in order to fit more using environments, the two oblique  
20 arms 1 intersected are located on a same side of the transverse arm 2.

In the abovementioned description, it is to be noted that terms “mount”, “link” and “connect” shall be understood in a broad sense. For example, it can be fixed connected, detachably connected or integrally connected; and it can directly

connected, can be indirectly connected via an intermediate medium and can be communicated within two components.

Although the utility model is depicted by the embodiments, those of ordinary skill in the art know that the utility model has many variations and  
5 changes without deviating from the spirit of the utility model. It is expected that the attached Claims include these variations and changes without deviating from the spirit of the utility model.

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## CLAIMS

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1. A star-shaped assembly for a glass curtain wall, comprising two cross-connected oblique arms, and a transverse arm that is connected with the two oblique arms and is intersected with the oblique arms at a same point,  
5 wherein the oblique arms and the transverse arm are solid, and two ends of the oblique arms and the transverse arm are both provided with connecting joints.

2. The star-shaped assembly for a glass curtain wall as claimed in claim 1, wherein the two oblique arms and the transverse arm are formed integrally, the sections of the oblique arms and the transverse arm are square, and widths and  
10 heights of the joints arranged on the end portions of the oblique arms and the transverse arm are smaller than widths and heights of the corresponding oblique arms and the transverse arm.

3. The star-shaped assembly for a glass curtain wall as claimed in claim 1, wherein a larger opposite angle formed by the two oblique arms is equally  
15 divided by the transverse arm.

4. The star-shaped assembly for a glass curtain wall as claimed in any one of claims 1-3, wherein the star-shaped assembly formed by the two oblique arms and the transverse arm is cut by a CNC machine tool.