COLLAPSIBLE, FLEXIBLE DISPLAY SYSTEM

CROSS REFERENCE TO RELATED APPLICATIONS

This application is a Continuation-In-Part Application of copending prior International Application No. PCT/SE2012/050143, filed Feb. 13, 2012, which claims priority to Swedish Application No. 1100134-4, filed Feb. 25, 2011 and U.S. Provisional Application No. 61/447,521, filed Feb. 28, 2011, all of which are herein incorporated by reference in their entirety.

FIELD OF THE INVENTION

The present invention relates according to a first aspect to a collapsible, flexible display system.

According to a second aspect the present invention relates to an alternative collapsible, flexible display system.

BACKGROUND OF THE INVENTION

The patent document SE 529 576 C2 relates to a display system which uses a magnetic coupling or a screw/thread coupling in order to connect different tubes horizontally. The display system uses metal tubes which only can be connected in a radial plane with the aid of guide traces in the coupling area. The display system uses both straight and curved tubes, but they are both of a rigid material, in order to create curved shapes for suspending a screen.

A main disadvantage with this solution is that it is difficult to assemble in that it comprises a lot of different parts. It is especially difficult for one person to assemble a display system according to the above presented solution. Furthermore, the display system according this solution can only have predetermined shapes. Another advantage is that the display system will be rather heavy due to all metal tubes.

SUMMARY OF THE INVENTION

The above mentioned problems are solved with a collapsible, flexible display system as described below. The display system is operable to create different spatial shapes of a continuous screen. The display system comprising at least two stands, each stand comprising a first part which support against an underlying supportive surface, wherein the stand also comprises a pole means, with a first end removably secured in the first part, and a second end provided with a first coupling means. The display system also comprises essentially hollow, straight members of a rigid material, each member comprises a first end part, and a second end part, and at least one essentially hollow, at least partly bendable member of a flexible material, each member comprises a first end part, and a second end part. Each end part comprises either a male part, or a female part, at least one of them of a magnetic material, and operable to magnetically fasten to each other. Different members are connected to each other in order to form an upper part, and a lower part, both comprising the same type of members. If an end part of an at least partly bendable member comprises a female part, or a male part of a magnetic material, the end part comprises a sleeve means arranged between the end part, and the female part, or the male part. The screen comprises an upper edge welt, and a lower edge welt adapted to receive the upper part respectively the lower part. Each pole means is provided with a second coupling means arranged in connection to the first end. When the display system is mounted, the upper edge welt comprising the upper part are fastened in a number, n, of first coupling means, and the lower edge welt comprising the lower part are fastened in the number, n, of the second coupling means.

A main advantage with this solution is that it is very easy to assemble the display system. It is even possible for only one person to assemble the display system without having to use a ladder. Another very important advantage is that this solution offers more freedom in creating different spatial shapes of a continuous screen. Another advantage is that it is possible to decrease the weight of the display system, which is of importance when transporting a disassembled display system.

The above mentioned problems are also solved with a collapsible, flexible display system as described below. The display system is operable to create different spatial shapes of a continuous screen. The display system comprises at least two stands, each stand comprising a first part which support against an underlying supportive surface, wherein the stand also comprises a pole means, with a first end removably secured in the first part, and a second end provided with a first coupling means. The display system comprises at least two essentially rectangular first screens, each first screen comprising two essentially hollow, straight members of a rigid material, one arranged in connection with a first short end of the first screen, and the other arranged in connection with a second short end of the first screen. Each member comprises a first end part, and a second end part. Each first screen comprises a first magnetic strip means arranged in connection with a first longitudinal end of the first screen, and a second magnetic strip means arranged in connection with a second longitudinal end of the first screen. Furthermore, the display system also comprises at least one essentially rectangular second screen, each second screen comprises two essentially hollow, at least partly bendable members of a flexible material, one arranged in connection with a first short end of the second screen, and the other arranged in connection with a second short end of the second screen. Each member comprises a first end part, and a second end part. Each second screen comprises a first magnetic strip means arranged in connection with a first longitudinal end of the second screen, and a second magnetic strip means arranged in connection with a second longitudinal end of the second screen. Each end part comprises either a male part, or a female part, at least one of them of a magnetic material. The different screens are connected to each other by the members being connected to each other magnetically, and the magnetic strip means being connected to each other magnetically. The members are connected to the first coupling means, and to second coupling means arranged in connection to the first end of each pole means, thus creating a continuous screen.

A main advantage with this solution is that it is very easy to assemble the display system. It is even possible for only one person to assemble the display system without having to use a ladder. Another very important advantage is that this solution offers more freedom in creating different spatial shapes of a continuous screen. Another advantage is that it is possible to decrease the weight of the display system, which is of importance when transporting a disassembled display system.

A further advantage in this context is achieved if at least one of the at least partly bendable members has the first end part, and the second end part provided with a female part, at least one of them being of magnetic material. This embodiment also covers abutting female parts of different partly