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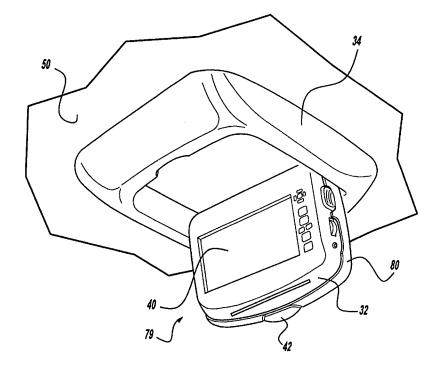
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(57) Abstract

A video display system (30) is provided. The video display system includes a housing (80) and a screen console (38) having a screen (40) moveably connected to the housing. A digital video disc player (32) is integrally positioned within either the housing or the screen console. The screen console is removably attached to the housing.



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VIDEO DISPLAY SYSTEM FOR A VEHICLE

BACKGROUND OF THE INVENTION

1. Field of the Invention

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The present invention relates generally to a video display system, and, more particularly, to a video display system which is mountable in a vehicle and also removable for use outside the vehicle.

2. Discussion of the Related Art

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Televisions and video cassette players have recently become quite popular in motor vehicles as a means of providing entertainment for both children and adults. Such devices, for the most part, however, have been limited to use in larger vehicles such as sport utility vehicles, mini-vans, and full size vans due to the space requirements for conventional televisions and video cassette players. Such systems have often been mounted in a console on the floor of a vehicle, as well as to the headliner of a vehicle. In either mounting, such systems require a significant amount of space. Also, such systems have typically not been removable easily from the vehicle for use outside the vehicle with an AC power source.

More recently advances in Liquid Crystal Display (LCD) panels have significantly improved the picture and contrast afforded by these types of displays, making them suitable for use in a wide variety of applications. LCDs are much thinner than conventional cathode ray tubes (CRTs) and therefore require significantly less space than a conventional television employing a CRT as a picture tube. LCDs are also much lighter in weight than CRTs, therefore making them readily portable, as evidence by the popularity of laptop computers. The lightweight and compact configuration of an LCD panel would therefore enable it to



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easily be mounted in various interior areas of a motor vehicle such as a sport utility vehicle, truck, van, or car, where the mounting of a video screen having a CRT would not be possible because of space constraints.

Even more recently, Digital Video Disc (DVD) players have become increasingly popular. DVD players are significantly more compact than video cassette players, lighter in weight, generate less heat and offer significantly enhanced picture and sound quality over a VHS format videocassette. The extremely compact dimension of a DVD, which is essentially the same as a compact disc, further enables the dimensions of the DVD player to be kept very compact. DVD players are not limited to playing video discs, but can also play compact discs as well.

In view of the foregoing performance and compact size advantages offered by LCD panels and DVD players, it would be highly desirable to incorporate both such devices into an integrated LCD/DVD unit which could be easily mounted within a motor vehicle such as a car, sport utility vehicle, van, mini-van, or truck. More preferably, it would be highly desirable to incorporate an integrated LCD/DVD unit into a console in such a manner that the LCD/DVD unit can be quickly and easily moved into a viewable position, such as flipped down from a headliner mounted console, and also easily moved into a stowed position so that it is out of the way when not in use.

It would further be highly desirable to provide an LCD/DVD player which can be quickly and easily removed from its associated console so that the entire unit can be used outside of the vehicle with an alternate AC or DC power source.



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SUMMARY OF THE INVENTION

The present invention relates to an integrated visual display/digital media player in the form of an integrated LCD/DVD unit or video display system and a docking member which is movably mounted within a console. The video display system can be used to watch material contained on digital video discs or to play compact discs, provided speakers are coupled to the video display system.

In one preferred embodiment, the video includes a housing and a screen console having a screen. The screen console is moveable between a first position and a second position. A digital video disc player is simultaneously integrally positioned within one of the housing and the screen console and operably connected to the screen.

In another preferred embodiment the video display system is releasably coupled to the docking member. The docking member is in turn movably coupled to the console. The console may be mounted at many places within the vehicle, but in the preferred embodiment is mounted to the headliner of the vehicle. A latch on the back of the docking member automatically holds it in a retracted or "stowed" position when the unit is inserted into the docking member and then folded up into the console. Latch assemblies on the video display system releasably secure it to the docking member yet permit the unit to be easily uncoupled from the docking member and removed for use outside of the vehicle.

The present invention requires only a small portion of the space required by a television having a cathode ray tube and a video cassette player. When in the stowed position, the video display system is held within its associated console and forms an unobtrusive system which does not interfere appreciably with the driver's vision out of the rear of the vehicle, when mounted in the headliner. The system, however, is compact



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