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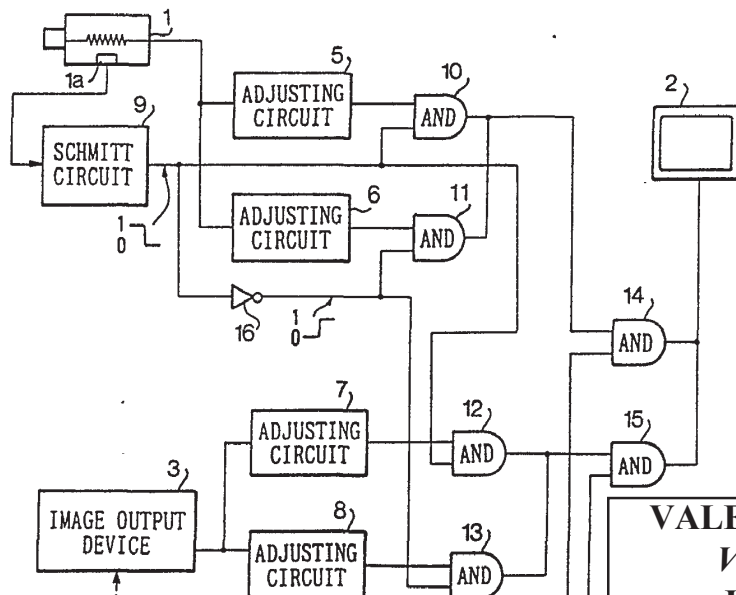
GB 1495773 A EP 0285521 A1 WO 88/04566 A1
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(58) Field of search

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(54) System for controlling a video display system of a motor vehicle

(57) The intensity of ambient light outside a motor vehicle is detected by an automatic iris system 1a, of a television camera 1 and produces output signals having different levels dependent on the detected intensity. Adjusting circuits 5,6 are provided for adjusting the video signal to different image conditions so as to display clear images on a video monitor 2 at various intensities of the outside light. A suitable one of the adjustment circuits is selected 10, 11 in response to the light signals, thereby displaying a clear image on the display. The video monitor may provide the rearward view of the vehicle instead of a rearview mirror, the camera providing an outside view from the vehicle. Stored video signals may be selected 4 for display e.g. road map data and graphics from an image output device 3.



VALEO EXHIBIT 1010
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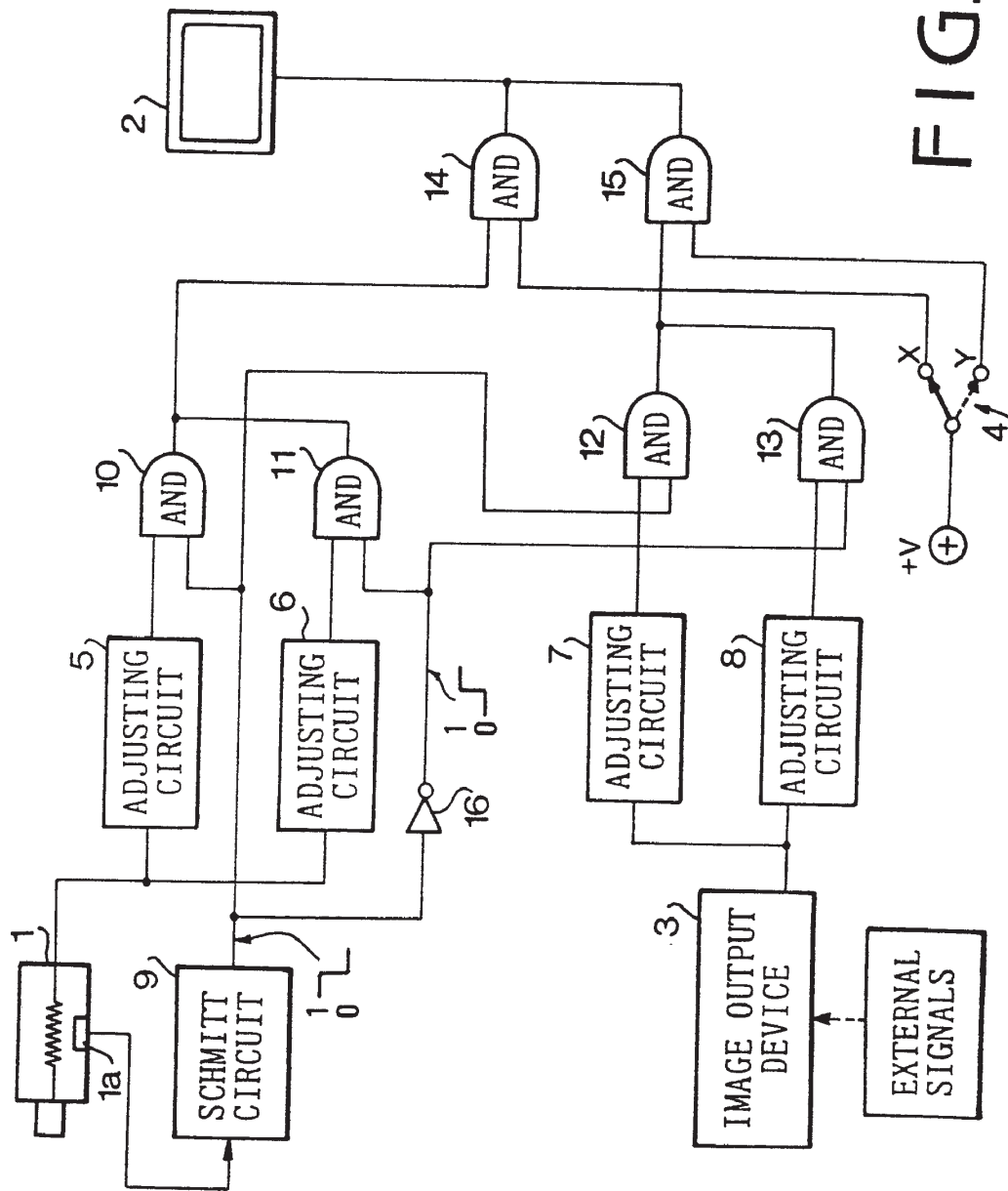


FIG. 1

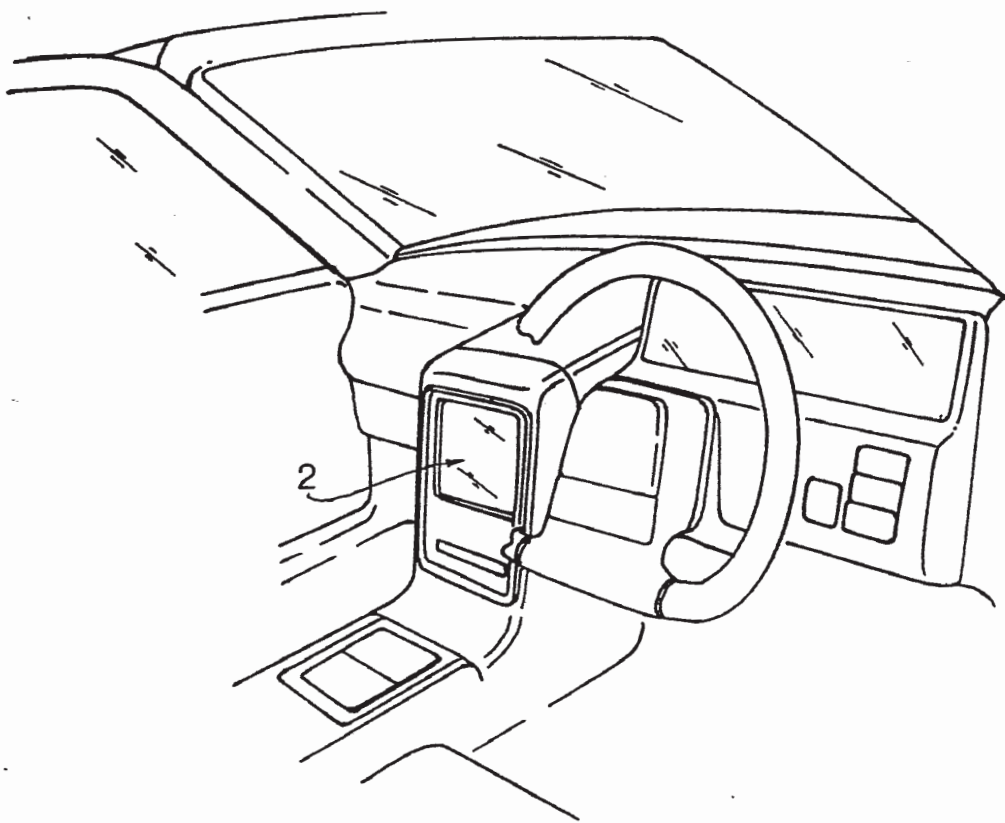


FIG. 2

VIDEO DISPLAY CONTROL SYSTEM FOR A
MOTOR VEHICLE

The present invention relates to a television monitor system with a display provided in a motor vehicle, and more particularly to a system for controlling the display of the monitor system. A CRT (Cathode-Ray-Tube) display may be provided in a motor vehicle for receiving television broadcasting, reproducing videotapes and displaying a road map and traffic information around the area where the vehicle is operating using computer graphics and an image output device. Further, if a television camera is installed on the vehicle for monitoring the rearward view from the vehicle, this view may be displayed on the display as a substitute for a rearview mirror.

Japanese Utility Model Application Laid-open 59-91081 and Japanese Patent Application Laid-open 62-241747 disclose monitor display systems provided in a motor vehicle. In order to ensure safe driving of the vehicle, these systems are provided with inhibitor means which prevents the television system from operating when driving the vehicle.

However, it is necessary to display map information and the rearward view from the vehicle while driving, and it is desirable to provide a clear picture on the display.

Visibility of the picture on the display depends on intensity of the outside light which changes in accordance the time of day and geographical location. Consequently, whenever the intensity of the outside light changes the driver must adjust the picture image on the display to control the luminance, contrast, and colour, by operating respective adjusting knobs provided on the display, which is troublesome for the driver.

The present invention seeks to provide a system for controlling a monitor display system of a motor vehicle in which a picture on a display is automatically and properly controlled in accordance with intensity of outside light of the vehicle.

According to the present invention, there is provided a system for controlling a video display system of a motor vehicle including a television camera producing a video signal and a monitor for displaying corresponding images, the system comprising:

sensing means for sensing ambient light levels outside the vehicle and for producing corresponding output signals;

adjustment circuits for adjusting the video signal to different image conditions so as to control the displayed image; and

means responsive to the output signals of the sensing means for controlling the adjustment circuits so as to optimise the image.

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