

(21) Application No 9010783.0
(22) Date of filing 14.05.1990
(30) Priority data
(31) 01125349 (32) 17.05.1989 (33) JP

(51) INT CL⁵
H04N 5/58
(52) UK CL (Edition K)
H4F FAA FD1X FD24 FD27A2 FD27M FD30A3
FD30C FD30D9 FD41F FD42V
U1S S1820

(71) Applicant
Fuji Jukogyo Kabushiki Kaisha

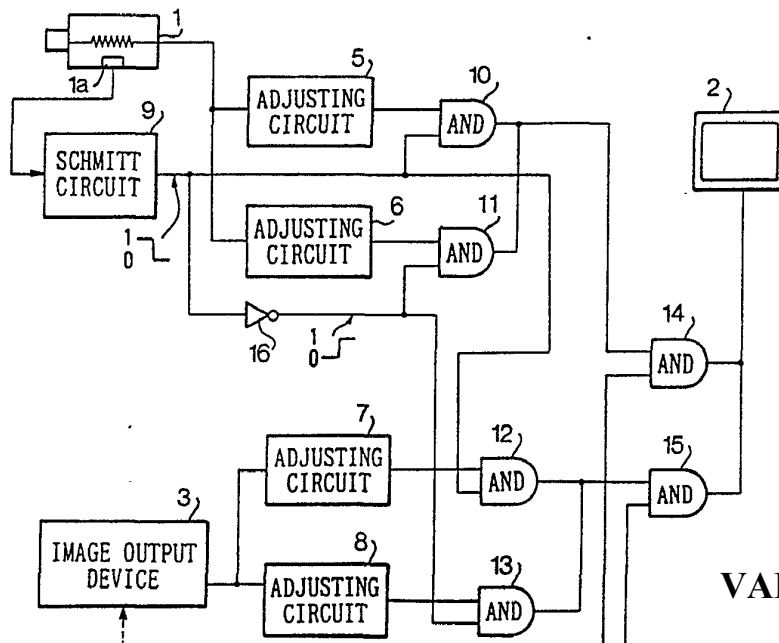
(Incorporated in Japan)

7-2 Nishishinjuku 1-chome, Shinjuku-ku, Tokyo,
Japan
(72) Inventor
Masato Sakurai
(74) Agent and/or Address for Service
Batchellor Kirk & Eyles
2 Pear Tree Court, Farringdon Road, London,
EC1R 0DS, United Kingdom

(56) Documents cited
GB 1495773 A EP 0285521 A1 WO 88/04566 A1
US 4355334 A
(58) Field of search
UK CL (Edition K) H4F FAA FDX FGXX
INT CL⁵ H04N
Online databases: WPI

(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 EX. 1010_001

GB 2 233 530

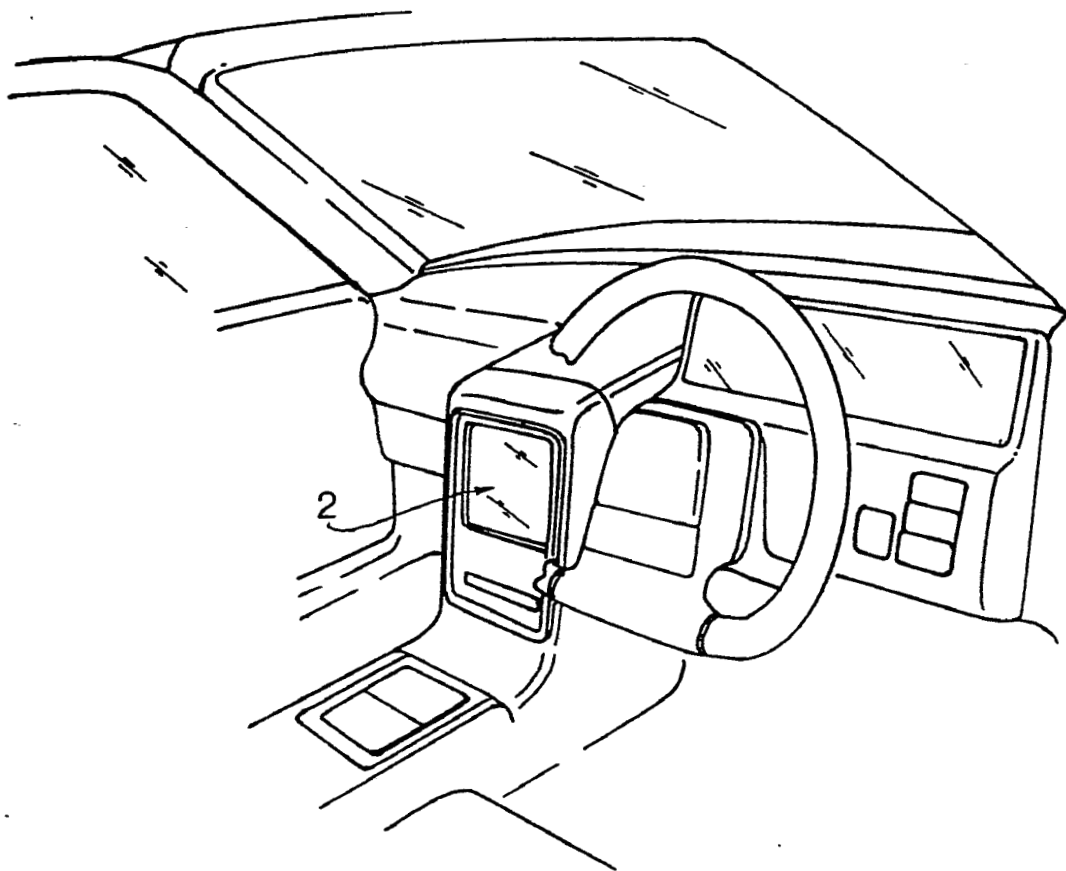


FIG. 2

VALEO EX. 1010_003

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.

VALEO EX. 1010_004

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.

VALEO EX. 1010_005

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.