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Payne

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(54) **VEHICLE BACKUP MONITORING AND ALARM SYSTEM**

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(52) **U.S. Cl.** **340/463**; 340/431; 340/435; 340/436; 340/903; 340/937; 348/148
(58) **Field of Search** .... 340/463, 436, 340/435, 460, 937, 932.2, 903, 431 A; 307/10.1, 10.7, 10.8; 364/108, 909; 348/148, 149, 118

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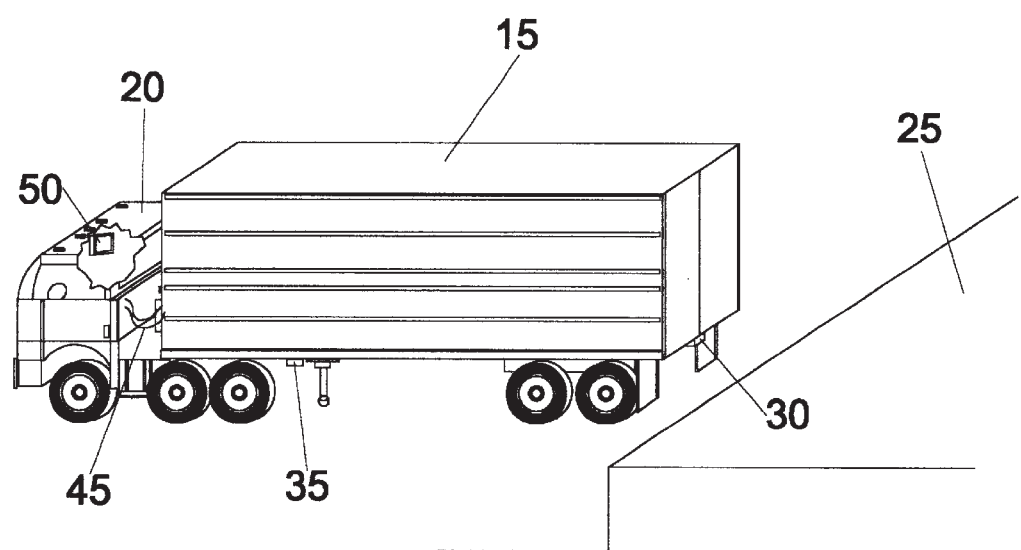|			
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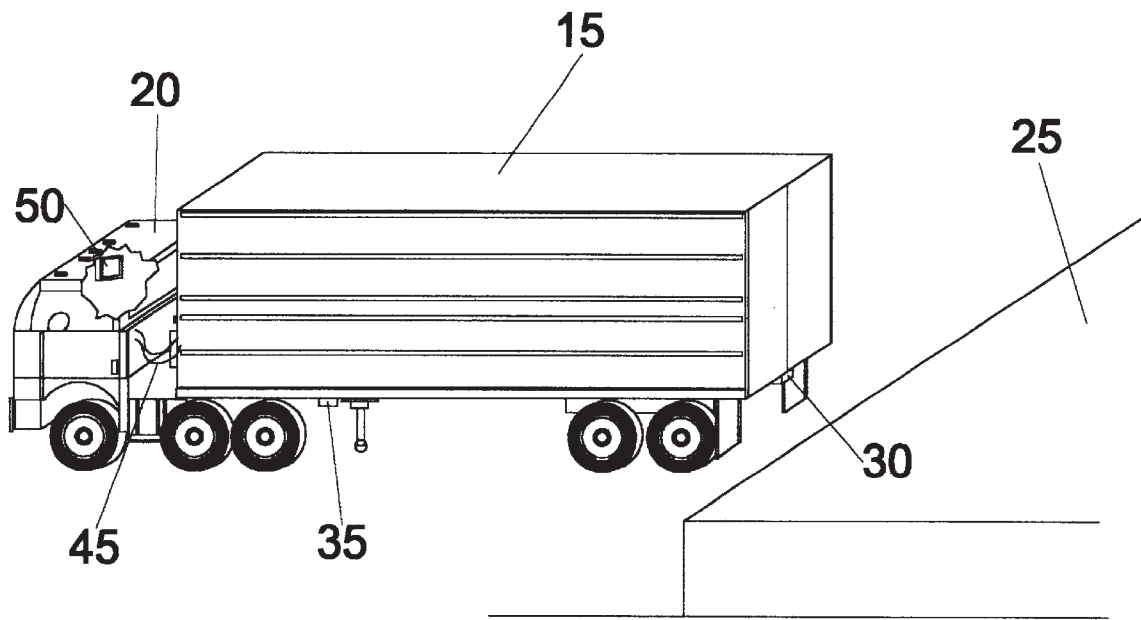(74) *Attorney, Agent, or Firm*—John D. Gugliotta

(57) **ABSTRACT**

A vehicle backup monitoring and alarm system which comprises a system of three closed circuit video cameras, three laser-based distance detection systems and an associated monitor is disclosed. A camera and a laser-based distance detection system are mounted on each side, as well as the rear of the motor vehicle or large truck, and coupled to one monitor, located by the driver, which displays all three images simultaneously. The distance to the closest object, displayed by each camera, as determined by the laser-based distance detection system, is superimposed over the respective object in the monitor. If any of these said distances fall below a minimum predetermined distance, the numeric representation will flash and an audible alarm will sound.

8 Claims, 4 Drawing Sheets

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Figure 1

Figure 2

Figure 3

Figure 4

DOCKET ALARM
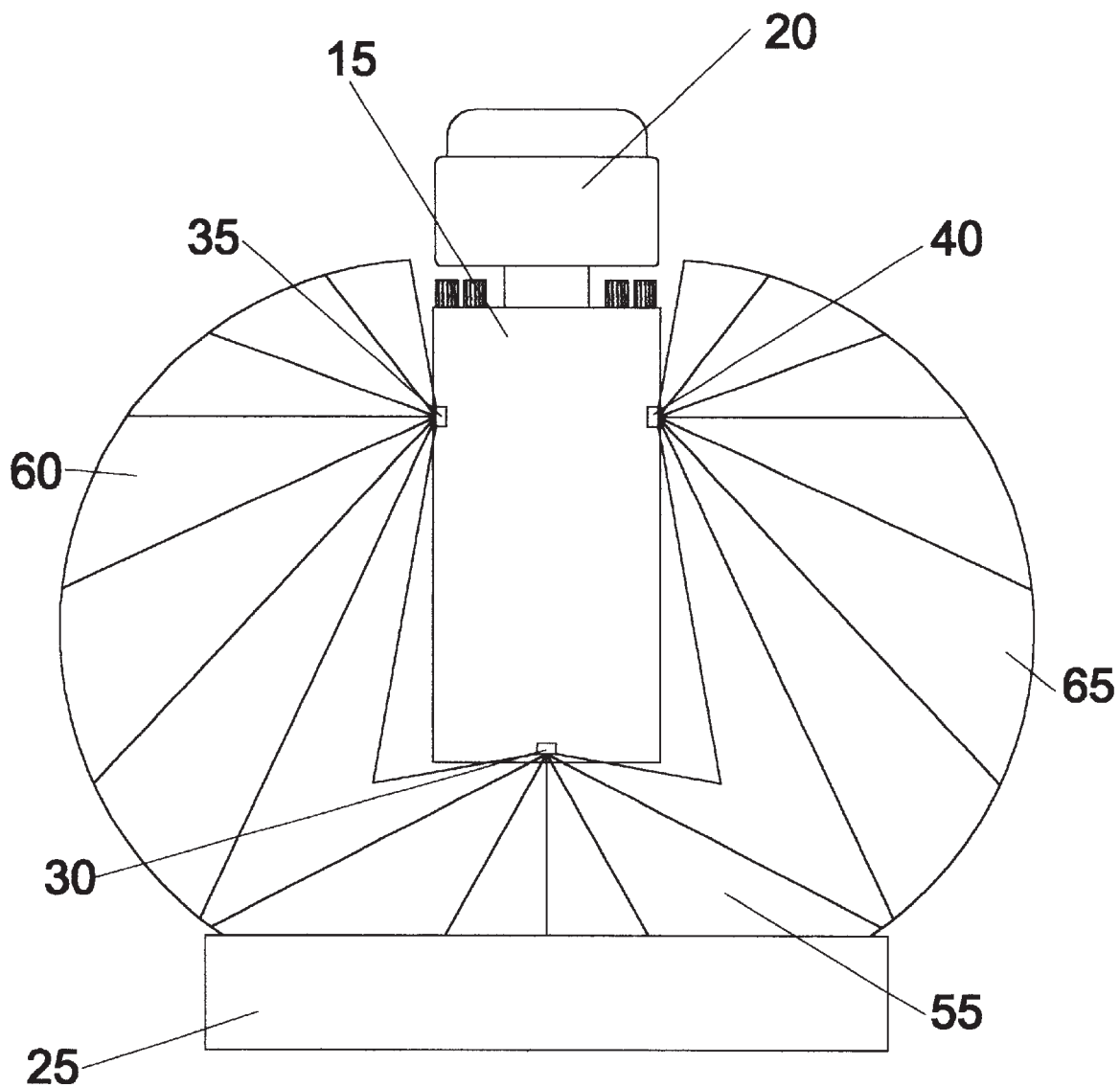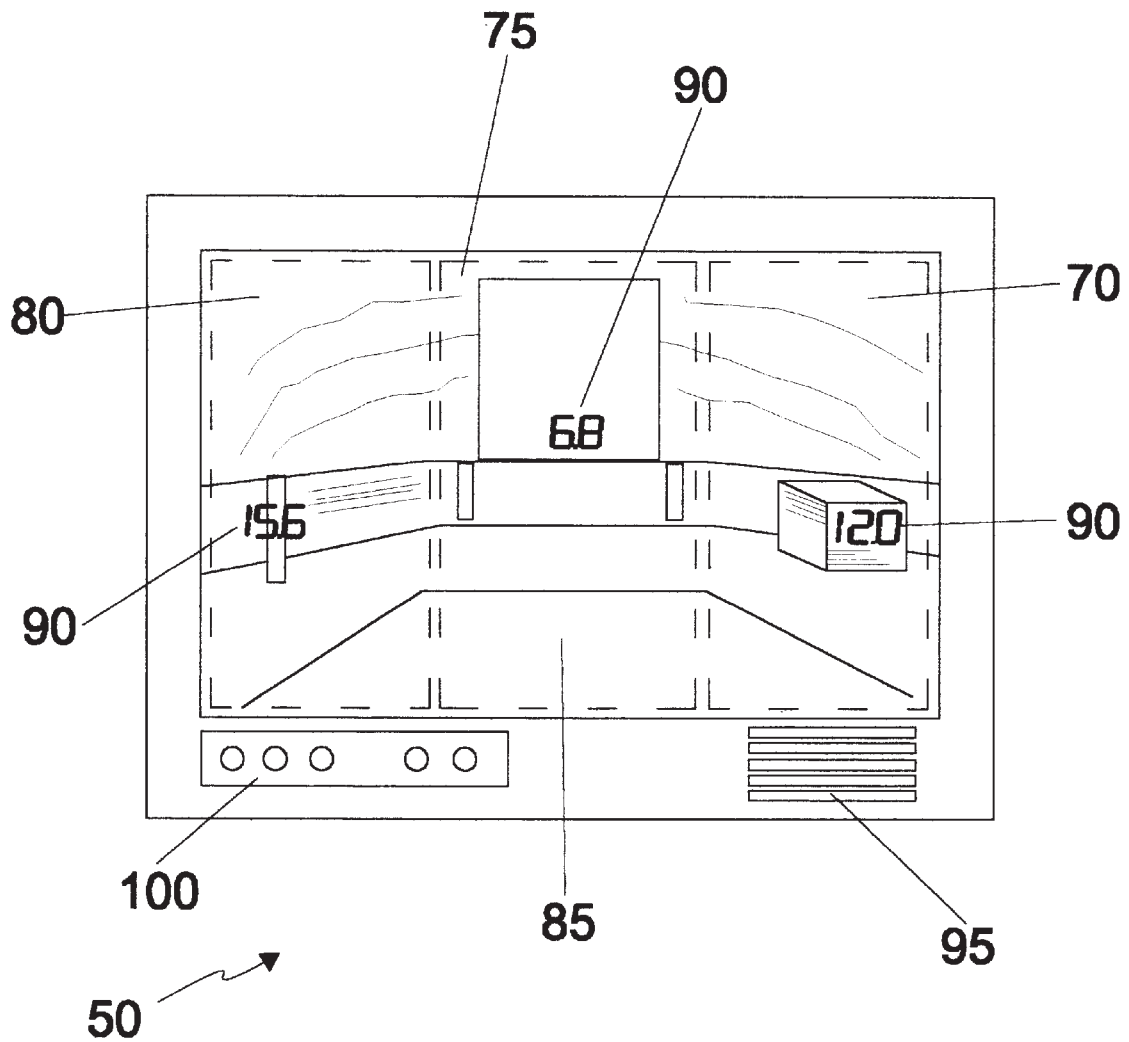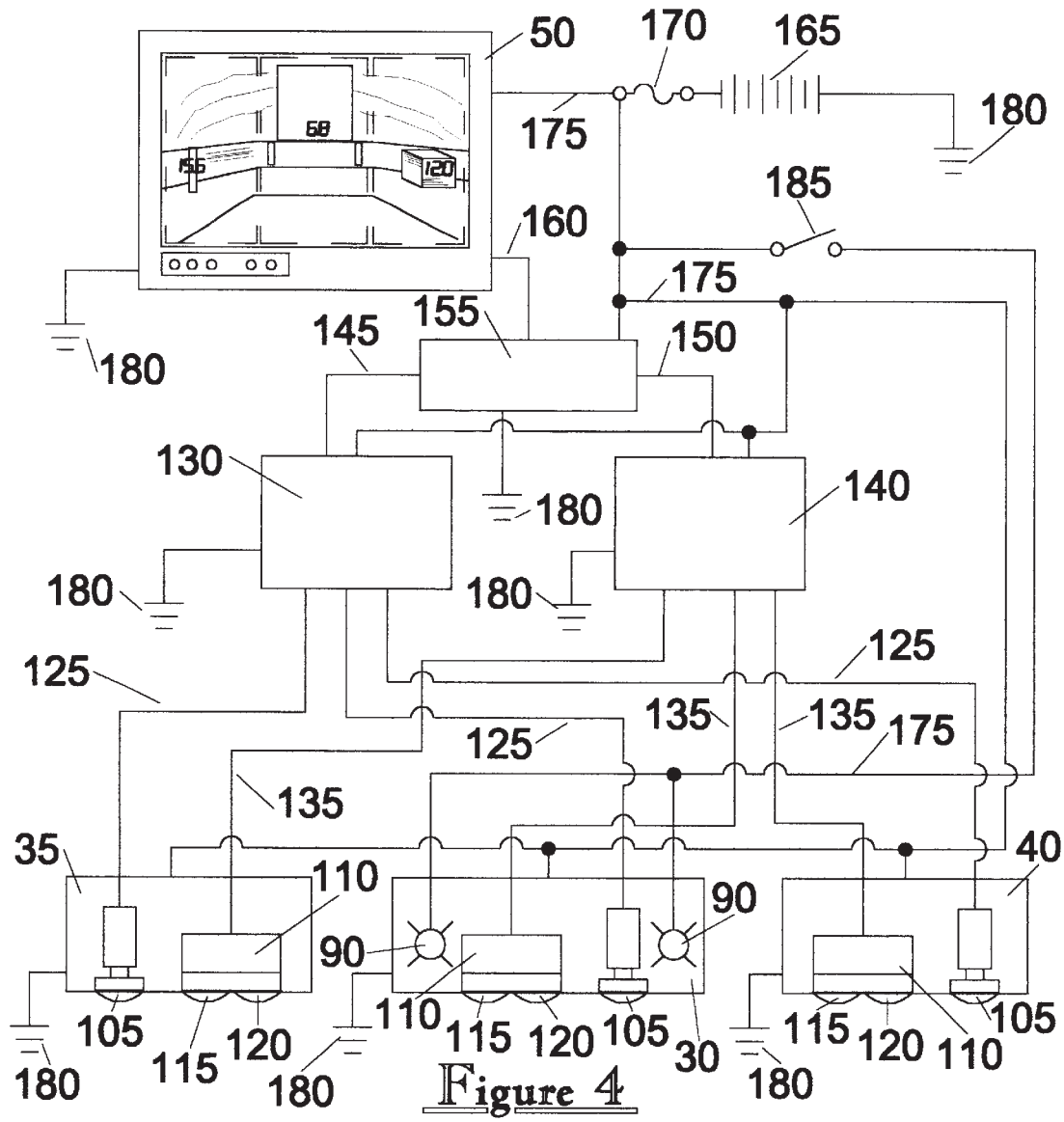
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