

[54] **TRAFFIC SAFETY MONITORING APPARATUS**

[75] Inventors: Naftali Schweitzer; Joseph S. Bodenheimer, both of Jerusalem; Gerald B. David, Savion, all of Israel

[73] Assignee: Driver Safety Systems Ltd., Herzliya on Sea, Israel

[21] Appl. No.: 344,161

[22] Filed: Apr. 27, 1989

[30] **Foreign Application Priority Data**

Apr. 27, 1988 [IL] Israel 86202

[51] Int. Cl.⁵ G08G 1/017; G08G 1/054

[52] U.S. Cl. 340/937; 340/936; 340/942; 364/438; 358/113

[58] Field of Search 340/937, 936, 942, 933-935, 340/938-939, 943; 358/113, 110, 108; 364/438

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,250,442 7/1941 Abell .
2,619,402 11/1952 McCutcheon .
2,769,165 10/1956 Bower .
2,813,468 11/1957 Jones .
3,165,373 1/1965 Scott .
3,181,150 4/1965 Ruppertsberg et al. .
3,206,748 9/1965 Miller .
3,516,056 6/1970 Matthews 340/942
3,544,958 12/1970 Carey et al. .

3,690,233 9/1972 Billingsley .
3,788,201 1/1974 Abell .
3,827,070 7/1974 Hoerenz et al. .
3,840,848 10/1974 Marshall et al. .
3,849,784 11/1974 Holzapfel .
4,063,820 12/1977 Borgese .
4,173,010 10/1979 Hoffmann .
4,214,265 7/1980 Olesen 340/937
4,648,718 3/1987 Sadamitsu et al. .
4,652,765 3/1987 Nishihara .
4,847,772 7/1989 Michalopoulos et al. 340/937

Primary Examiner—Donnie L. Crosland

Attorney, Agent, or Firm—Panitch Schwarze Jacobs & Nadel

[57]

ABSTRACT

A traffic monitoring system comprising apparatus for establishing a pair of precisely spaced radiation beams in association with a thoroughfare, whereby passage of a vehicle along the thoroughfare interrupts the radiation beams, apparatus for sending interruption of the radiation beams and providing output indications of vehicle speed and separation between adjacent vehicles (headway) and apparatus for photographing vehicles fulfilling predetermined criteria including photography trigger apparatus which is responsive to the sensed vehicle speed of the vehicle being photographed for providing a consistently positioned photographic record of the vehicle, irrespective of vehicle speed.

19 Claims, 12 Drawing Sheets

