ABSTRACT OF THE DISCLOSURE (FIG. 4)

"SYSTEM FOR OPTICALLY DETECTING VEHICLES TRAVELING ALONG THE LANES OF A ROAD"

A system for optically detecting vehicles traveling a road having a plurality lanes, the system comprising a gantry provided at the road so as to straddle the plurality lanes, a plurality of optical line sensors provided on the gantry, for getting linear images of a surface of the road, the optical line sensors arranged in two rows and in a staggered pattern such that each has a view field overlapping the view filed of either adjacent optical line sensor by the sum of half the view filed and a width of a motor cycle, photoelectric sensor apparatus consisting of photo-projector elements and photo-detector elements and optical axes which are parallel to each other and are substantially located in the position of the view field of the optical line sensors, and a signal-processing section for detecting a vehicle traveling under the gantry in accordance with output signals of the optical line sensors and output signals of the photoelectric sensor apparatus, by using reference signals which the optical line sensors generate when no vehicles travel under them.