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11.12.91 Bulletin 91/50(71) Applicant: **UNIVERSITY COLLEGE LONDON**

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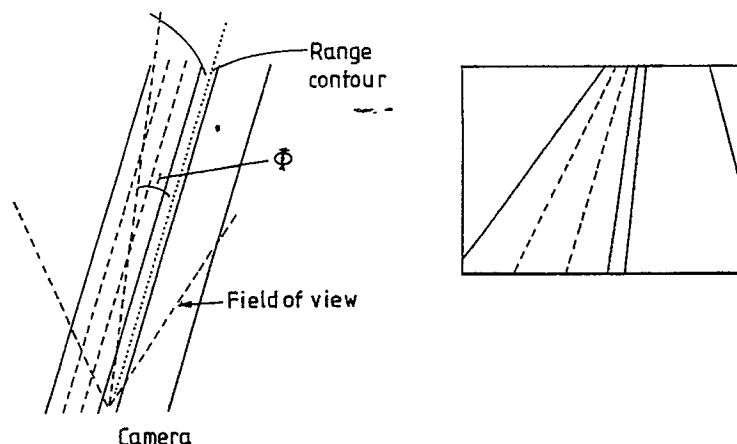
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(54) **Method and apparatus for traffic monitoring.**

(57) A method of traffic monitoring is described which comprises forming at least first and second scene images of a scene in which traffic may be present, the images being formed at instants of time separated by a time interval. At least one of the first and second scene images is processed to form an edge image representing the occurrence of edges in the scene, and a determination is made on the basis of the edge image of the presence or absence, and

spatial location, of traffic in the scene. A difference image is formed in which each pixel represents the difference between the intensity of the pixels of the first and second scene images at the corresponding point in the image, and a determination is made from the distribution of pixels of different intensities in the difference image of the presence or absence of movement in the scene.

*Fig.1.***EP 0 403 193 A3**



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EUROPEAN SEARCH REPORT

Application Number

EP 90 30 6317

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
D,Y	2ND INTERNATIONAL CONFERENCE ON ROAD TRAFFIC MONITORING, INSTITUTION OF ELECTRICAL ENGINEERS CONFERENCE February 9, 1989, pages 94 - 98; HOOSE: 'Queue detection using computer image processing ' * the whole document *	1,10	G 08 G 1/04 G 08 G 1/017 G 08 G 1/015
Y	EP-A-0 277 050 (INSTITUT NATIONAL DE RECHERCHE SUR LES TRANSPORTS ET LEUR SECURITE) * figures 1-4 *	1,10	
A	SYSTEMS & COMPUTERS IN JAPAN. vol. 17, no. 1, February 1986, NEW YORK US pages 62 - 72; YASUO KUDO: 'Traffic flow measurement system using image processing ' * page 63, left column, line 27 - line 40 *	1-16	
A	IEEE TRANSACTIONS ON VEHICULAR COMMUNICATIONS. vol. 38, no. 3, 1989, NEW YORK US pages 112 - 122; I ò IGO: 'Application of machine vision to traffic monitoring and control ' * page 119, left column, line 12 - page 121, right column, line 28 *	1-16	
A	WO-A-8 806 326 (REGENTS OF THE UNIVERSITY OF MINNESOTA) * figures 1-3 *	1-16	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			G 08 G
Place of search		Date of completion of search	Examiner
The Hague		11 October 91	CRECHET P.G.M.
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document T: theory or principle underlying the invention		E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons ----- &: member of the same patent family, corresponding document	