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**United States Patent** [19]**Foladare et al.**[11] **Patent Number:** **5,732,383**[45] **Date of Patent:** **Mar. 24, 1998**[54] **TRAFFIC INFORMATION ESTIMATION  
AND REPORTING SYSTEM**[75] Inventors: **Mark Jeffrey Foladare**, Kendall Park;  
**Shelley B. Goldman**, East Brunswick;  
**Kin K. Leung**, Edison; **Yzhak Ronen**,  
West Windsor; **Gabriel Gary**  
**Schlanger**, West Orange; **David Phillip**  
**Silverman**, Somerville, all of N.J.[73] Assignee: **AT&T Corp**, Middletown, N.J.[21] Appl. No.: **528,292**[22] Filed: **Sep. 14, 1995**[51] **Int. Cl.<sup>6</sup>** ..... **H04Q 7/20; G06F 19/00**[52] **U.S. Cl.** ..... **701/117; 701/118; 379/59**[58] **Field of Search** ..... 364/436, 437,  
364/438, 460; 379/58, 59; 455/33.1[56] **References Cited****U.S. PATENT DOCUMENTS**

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*Primary Examiner*—Michael Zanelli[57] **ABSTRACT**

An estimation of traffic conditions on roads located in the radio coverage areas of a wireless communications network is provided based on an analysis of real-time and past wireless traffic data carried on the wireless communications network. Data analyzed may include, for example, actual (current) and expected (past average) number of a) active-busy wireless end-user devices in one or more cells at a particular period of time, b) active-idle wireless end-user devices registered in a location area of the wireless communications network, c) amount of time spent by mobile end-user devices in one or more cells at a particular period of time.

**20 Claims, 5 Drawing Sheets**