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**LaFollette et al.**

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[54] **EARLY ARBITRATION ON A FULL DUPLEX BUS**

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[75] Inventors: **David W. LaFollette**, Sunnyvale;  
**Jerrold V. Hauck**, Fremont, both of Calif.

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[73] Assignee: **Intel Corporation**, Santa Clara, Calif.

*Primary Examiner*—Alpus H. Hsu  
*Assistant Examiner*—Afsar M Qureshi  
*Attorney, Agent, or Firm*—Blakely, Sokoloff, Taylor & Zafman LLP

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[51] **Int. Cl.**<sup>7</sup> ..... **H04B 7/212**; H04L 12/403; H04J 3/02

[57] **ABSTRACT**

[52] **U.S. Cl.** ..... **370/443**; 370/449; 370/462; 340/825.5

A method and apparatus for early arbitration in a full duplex bus system. Early arbitration in a distributed arbitration serial bus system permits the resolution of requests for a next fairness interval during a current fairness interval such that the grant of the highest priority request in the next fairness interval may immediately follow a last packet of a last subaction in a current fairness interval. In this way, the bandwidth previously wasted propagating an arbitration reset token and waiting for arbitration requests can be substantially eliminated.

[58] **Field of Search** ..... 370/443, 444, 370/449, 447, 461, 462, 347, 348, 450, 254, 255, 256, 408; 340/825.5, 825.08, 825.02

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**7 Claims, 7 Drawing Sheets**

