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(71) Applicant *(for all designated States except US)*: SONY ELECTRONICS, INC. [US/US]; 1 Sony Drive, Park Ridge, NJ 07656 (US).

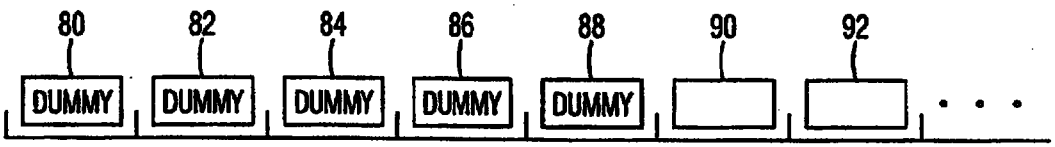
(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: LYM, Kevin [US/US]; 108 Hudson Bay, Alameda, CA 94502 (US). SHIMA, Hisato [JP/US]; 915 Inverness Way, Sunnyvale, CA 94087 (US). VU, Quan [US/US]; 2200 Skyline Drive, Milpitas, CA 95035 (US).

(74) Agents: HAVERSTOCK, Thomas, B. et al.; Haverstock & Owens LLP, Suite 420, 260 Sheridan Avenue, Palo Alto, CA 94306 (US).

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(54) Title: APPARATUS AND METHOD FOR PREDICTIVE TIME STAMPING OF ISOCHRONOUS DATA PACKETS



(57) Abstract

In order to predictively time stamp isochronous data packets transmitted over an IEEE 1394–1995 serial bus network, an application, which is to send a stream of isochronous data packets to a receiving node, first transmits a number of dummy frames each consisting of a number of packets. Preferably, these isochronous data packets make up frames of video data. From these dummy packets, the application obtains the time stamp values within the common isochronous packet (CIP) header of each packet. Using these obtained time stamp values, the application calculates a presentation time value for each data frame to be transmitted. The obtained time stamp value from a transmitted video frame is used to calculate the presentation time for a video frame which is a number of frames ahead within the transmit queue. Once the presentation time value for a frame is calculated, that value is then inserted by the application into the CIP header for the first packet within that frame and the frame is sent to the transmit queue for transmission to the receiving node over the IEEE 1394–1995 serial bus network.