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Nagashima

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(54) TRANSMISSION SYSTEM OF SHORT TIME LAG

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(58)		709/200, 201,
	709/220, 224,	225, 231, 232, 236; 370/230,

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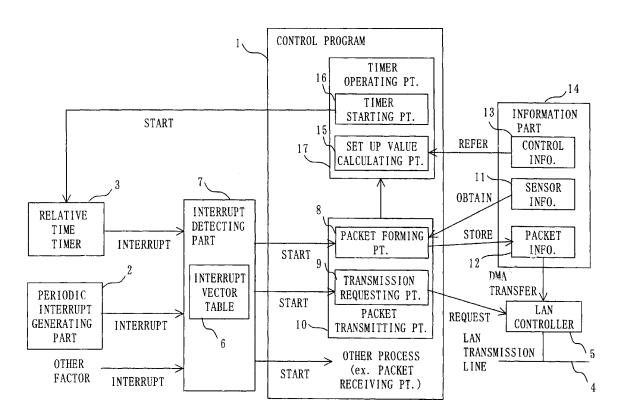
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(57) ABSTRACT

A delay time period, such as the H/W process time period, and the S/W process time period needed for starting up a timer, and a time period from the task starting to the packet transmission beginning are predicted and stored in the control information in advance. A set value calculating part calculates a timer set value at the system initialization. In a packet forming part, the timer set value is set in a relative time timer for starting the timer. The relative time timer generates an interrupt after a specific elapse time has passed for starting a transmission requesting part. By dint of this, the time lag of the time period from the period interrupt to the packet transmission beginning can be reduced, and each of the formed packets is certainly requested to be transmitted within each requested time period for processing.

17 Claims, 20 Drawing Sheets



231, 232



INFORMATION CONTROLLER CONTROL SENSOR PACKET INFO. INFO. INFO. LAN TRANSFER (PART TRANSMISSION LINE VNU STORE OBTAIN REQUEST REFER PACKET FORMING TRANSMITTING PT. CALCULATING PT. REQUESTING PT. OTHER PROCESS RECEIVING PT.) OPERATING PT. SET UP VALUE TRANSMI SS I ON (ex. PACKET STARTING PT. TIMER PACKET PT. CONTROL PROGRAM F. 8. 16 5-10/ START START START DETECTING INTERRUPT INTERRUPT VECTOR TABLE PART START INTERRUPT INTERRUPT INTERRUPT OTHER FACTOR GENERATING INTERRUPT RELATIVE PERIODIC. TIME TIMER PART



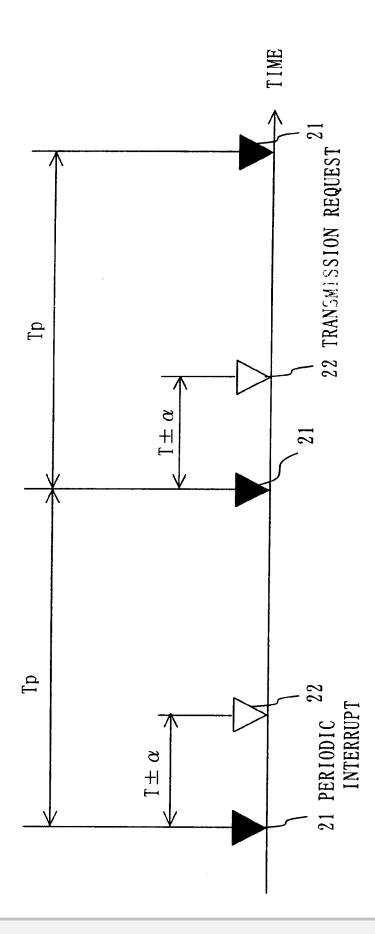


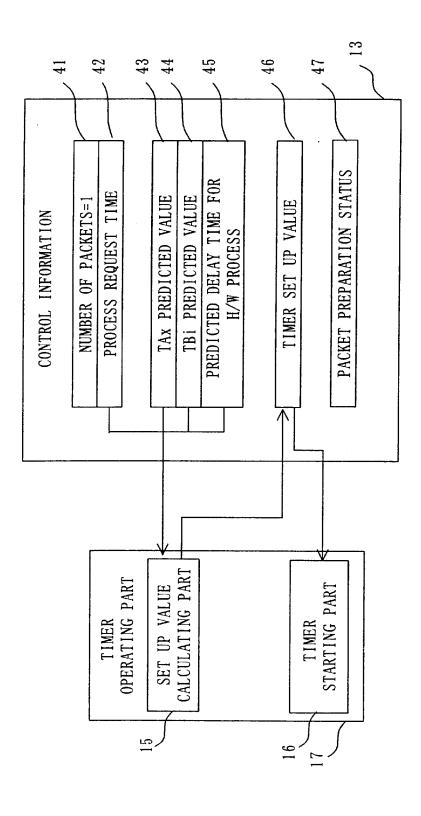
Fig. 2

22 TRANSMISSION REQUEST 38 Bj PROCESS B TBi $B\,i$ PROCESS D $T\pm \alpha$ 23 TIMER STARTING PROCESS A Ay 21 PERIODIC INTERRUPT Ax PROCESS



Fig. 3

Fig. 4



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