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United States Patent [19]

Rashkovskiy et al.

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[45] **Date of Patent: Sep. 19, 2000**

[54] **SELECTING A ROUTINE BASED ON PROCESSING POWER**

[75] Inventors: **Oleg B. Rashkovskiy**, Cupertino; **Ajaya V. Durg**, Sunnyvale, both of Calif.

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

[21] Appl. No.: **09/082,140**

[22] Filed: **May 20, 1998**

[51] **Int. Cl.**[7] **G06F 1/04**

[52] **U.S. Cl.** **713/300**; 713/501

[58] **Field of Search** 713/300, 323, 713/501

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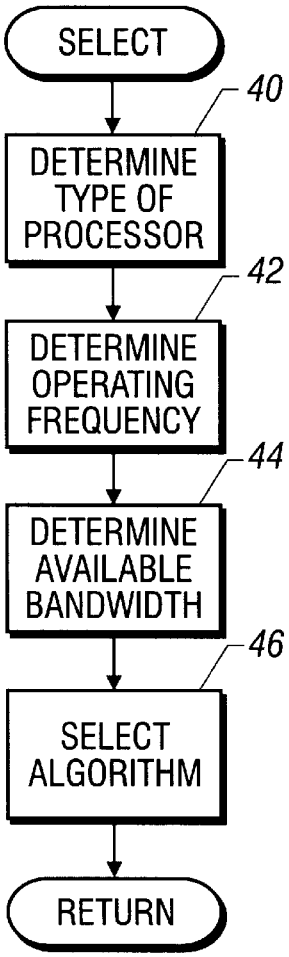
Primary Examiner—Glenn A. Auve

Attorney, Agent, or Firm—Trop, Pruner & Hu, P.C.

[57] **ABSTRACT**

A method includes determining an operating frequency of a processor. Based on the operating frequency, a routine is selected from a group of at least two routines, and the selected routine is executed. The routine may also be selected based on an unused processing bandwidth that is available to the processor.

29 Claims, 4 Drawing Sheets



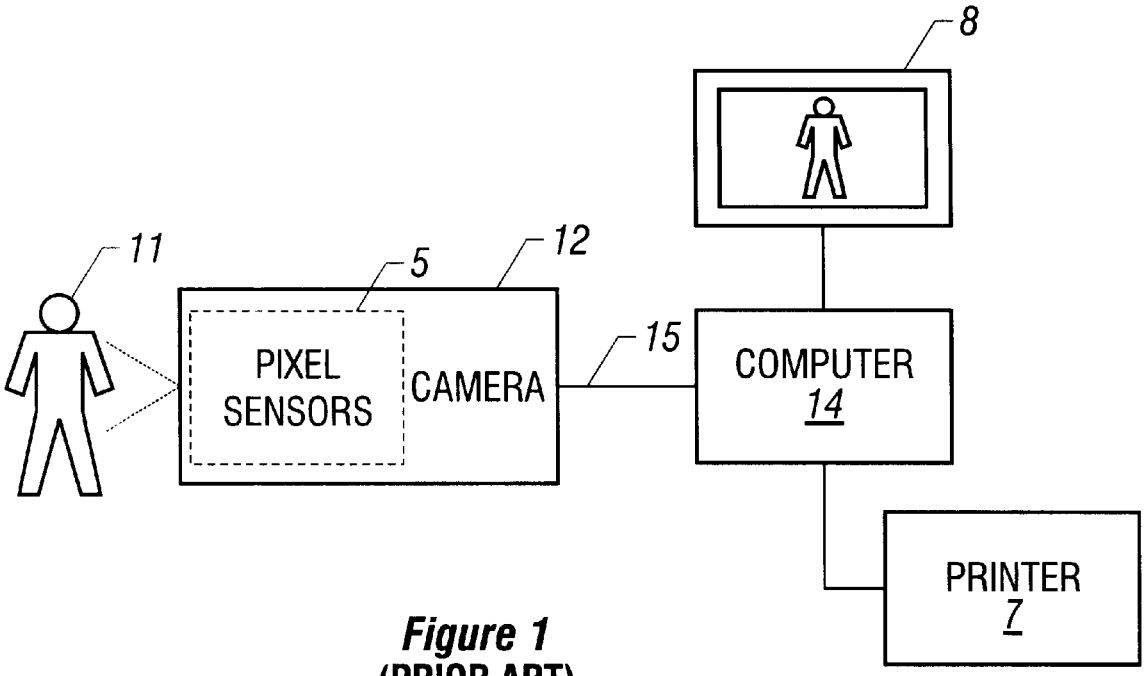


Figure 1
(PRIOR ART)

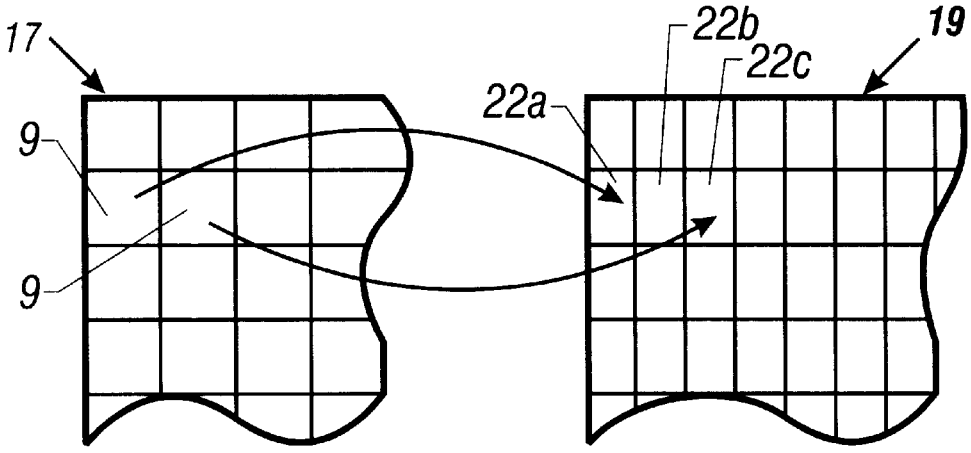


Figure 2
(PRIOR ART)

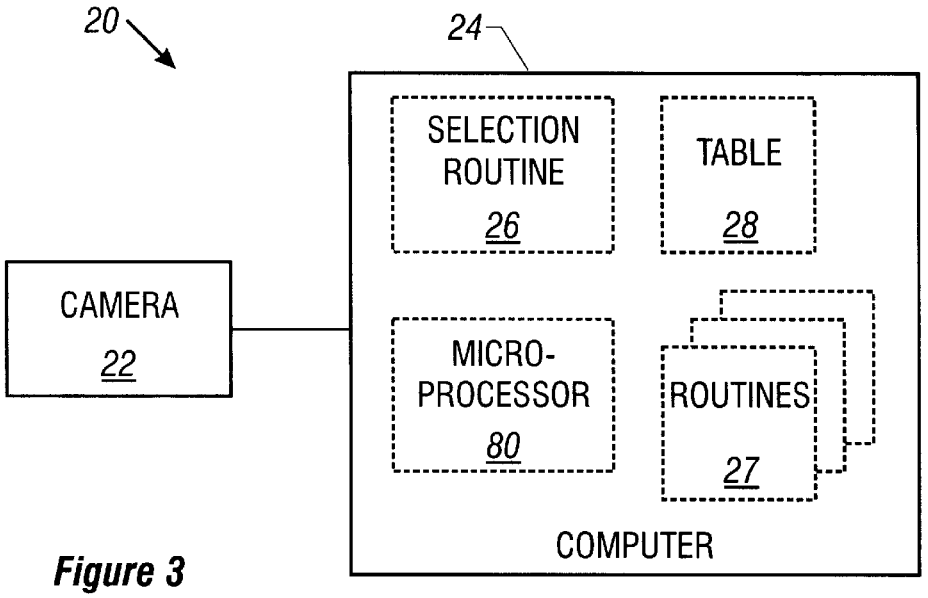


Figure 3

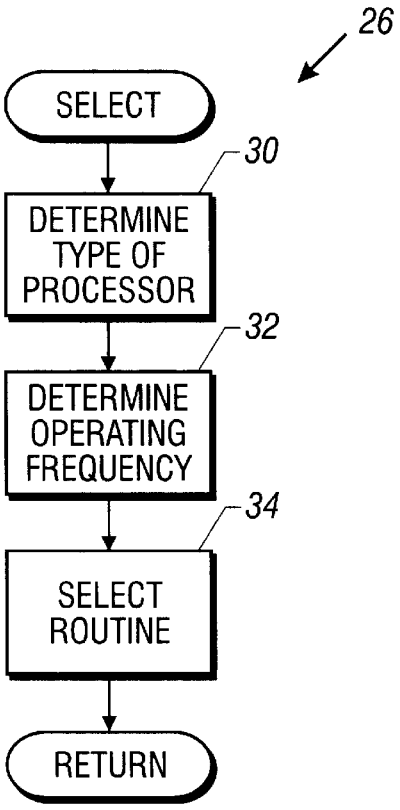


Figure 4

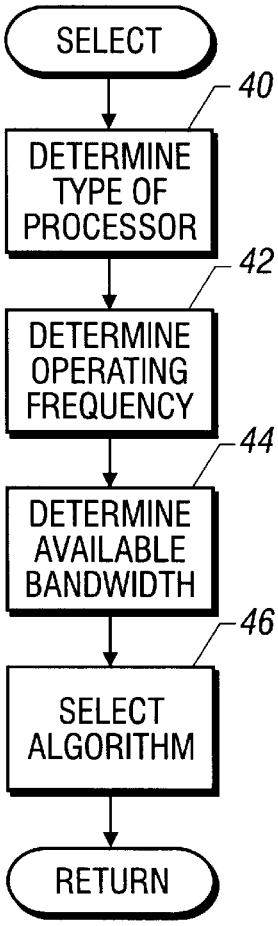
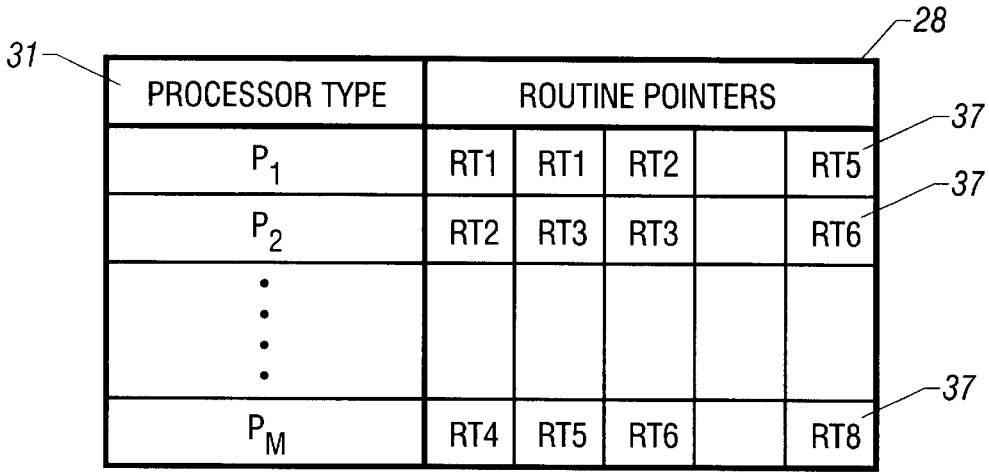
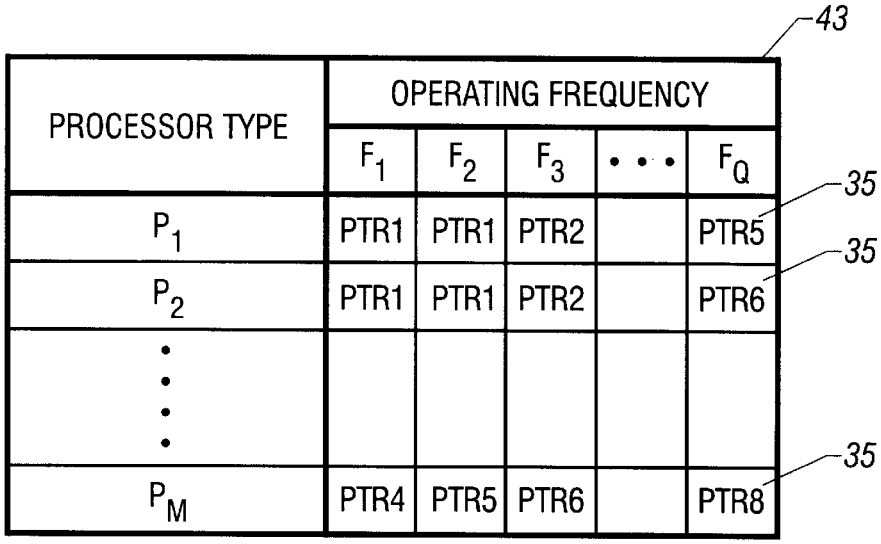


Figure 6



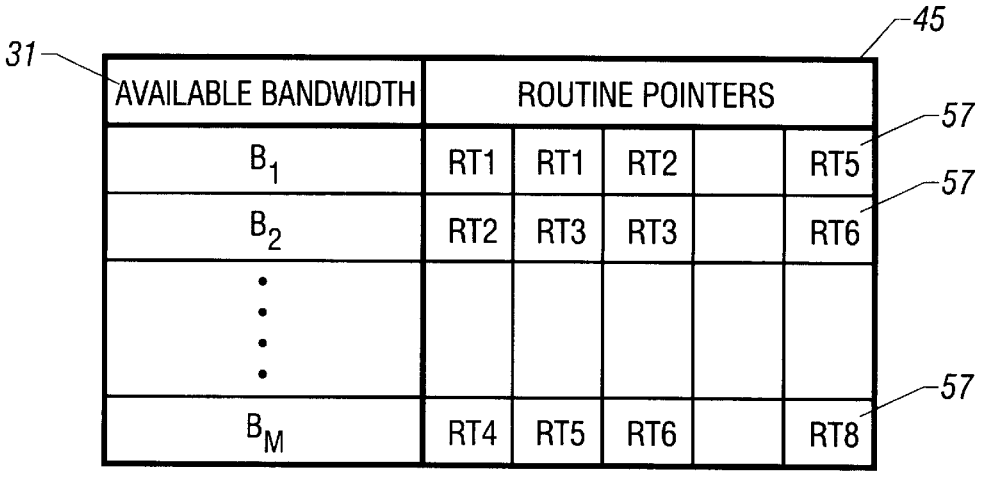
PROCESSOR TYPE	ROUTINE POINTERS				
P_1	RT1	RT1	RT2		RT5
P_2	RT2	RT3	RT3		RT6
• • • •					
P_M	RT4	RT5	RT6		RT8

Figure 5



PROCESSOR TYPE	OPERATING FREQUENCY				
	F_1	F_2	F_3	• • •	F_Q
P_1	PTR1	PTR1	PTR2		PTR5
P_2	PTR1	PTR1	PTR2		PTR6
• • • •					
P_M	PTR4	PTR5	PTR6		PTR8

Figure 7



AVAILABLE BANDWIDTH	ROUTINE POINTERS				
B_1	RT1	RT1	RT2		RT5
B_2	RT2	RT3	RT3		RT6
• • • •					
B_M	RT4	RT5	RT6		RT8

Figure 8

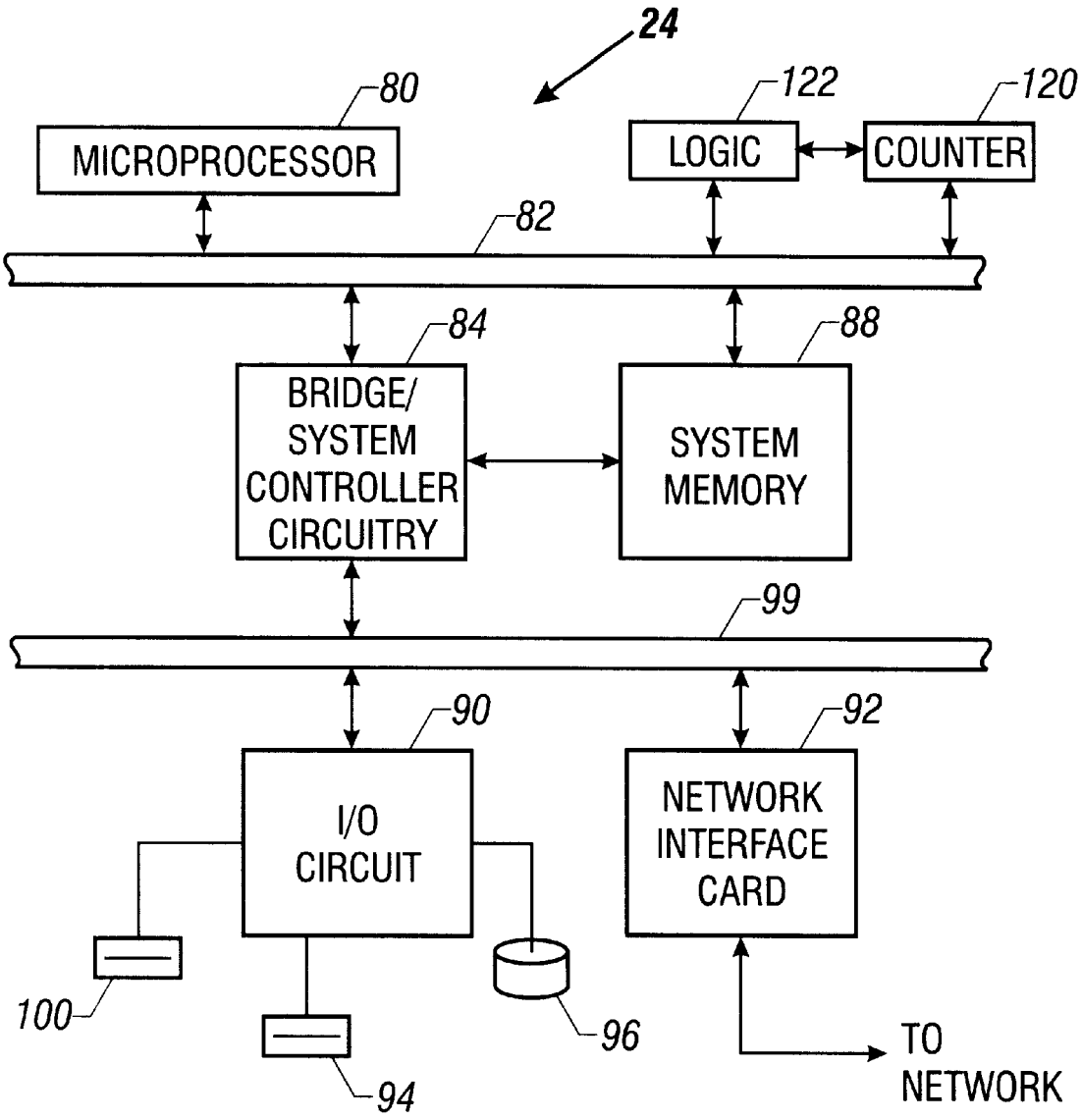


Figure 9

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