United States Patent [19]

Hassan et al.

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[54] **METHOD FOR TRANSMITTING MULTIRESOLUTION IMAGE DATA IN A RADIO FREQUENCY COMMUNICATION SYSTEM**

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[51] **Int. Cl.^{6}** **H04N 7/14**
[52] **U.S. Cl.** **348/13**; 345/328
[58] **Field of Search** 348/384, 12, 13, 348/426, 469; 358/260, 433; 345/328

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Primary Examiner—Victor R. Kostak
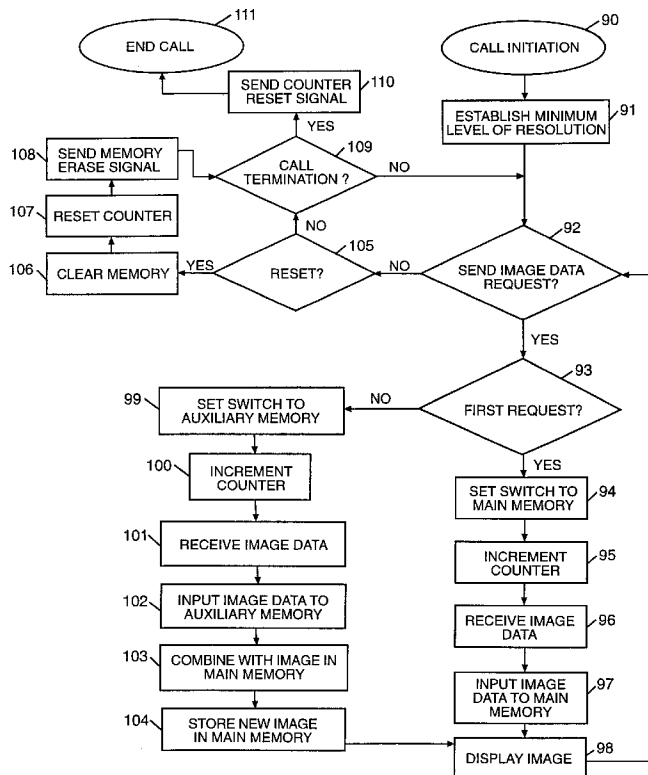*Attorney, Agent, or Firm*—Rhodes, Coats & Bennett, L.L.P.

[57] **ABSTRACT**

The present invention relates to a method for transmitting multiresolution image data via wireless devices in a radio frequency communication system wherein images are decomposed into levels of resolution. The image data is stored in discrete information blocks in an image storage unit including a base image and one or more image details. The base image represents the coarsest resolution of the image. Each image detail, when added to the base image, improves the resolution of the image. An image display unit transmits a request for image data to the image storage unit. In response to the initial request, the base image is transmitted to the image display unit. If the base image is insufficient, the resolution can be increased incrementally by sending additional image data requests to transmit additional image detail. The additional image detail is then transmitted to the image display unit and recombined with the base image to provide a higher level of resolution to the image.

33 Claims, 5 Drawing Sheets

FIGURE 1

FIGURE 2

30 RECEIVER MODULE

28 TRANSMITTER MODULE

26 IMAGE PROCESSOR

24 MAIN MEMORY
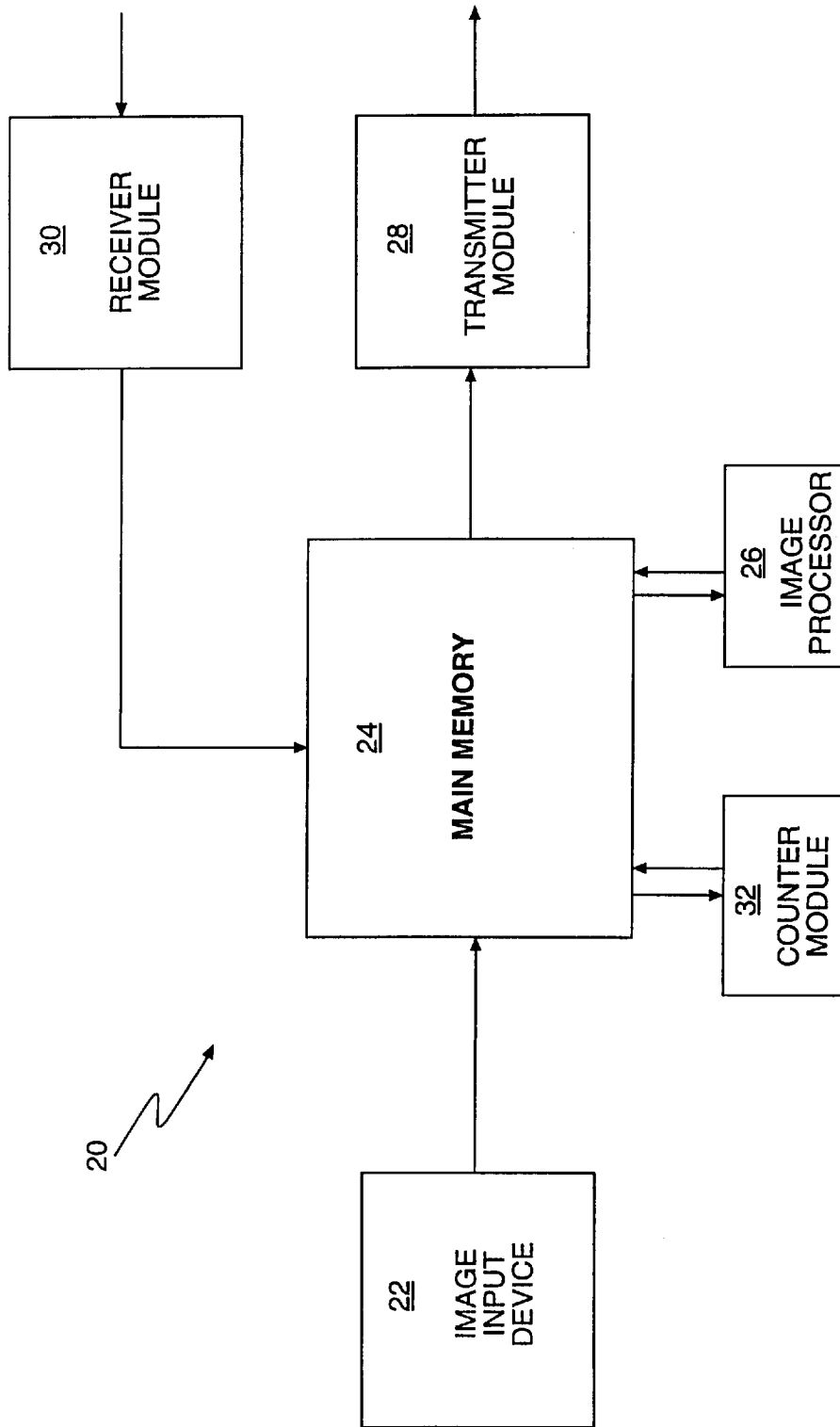
32 COUNTER MODULE

22 IMAGE INPUT DEVICE

20
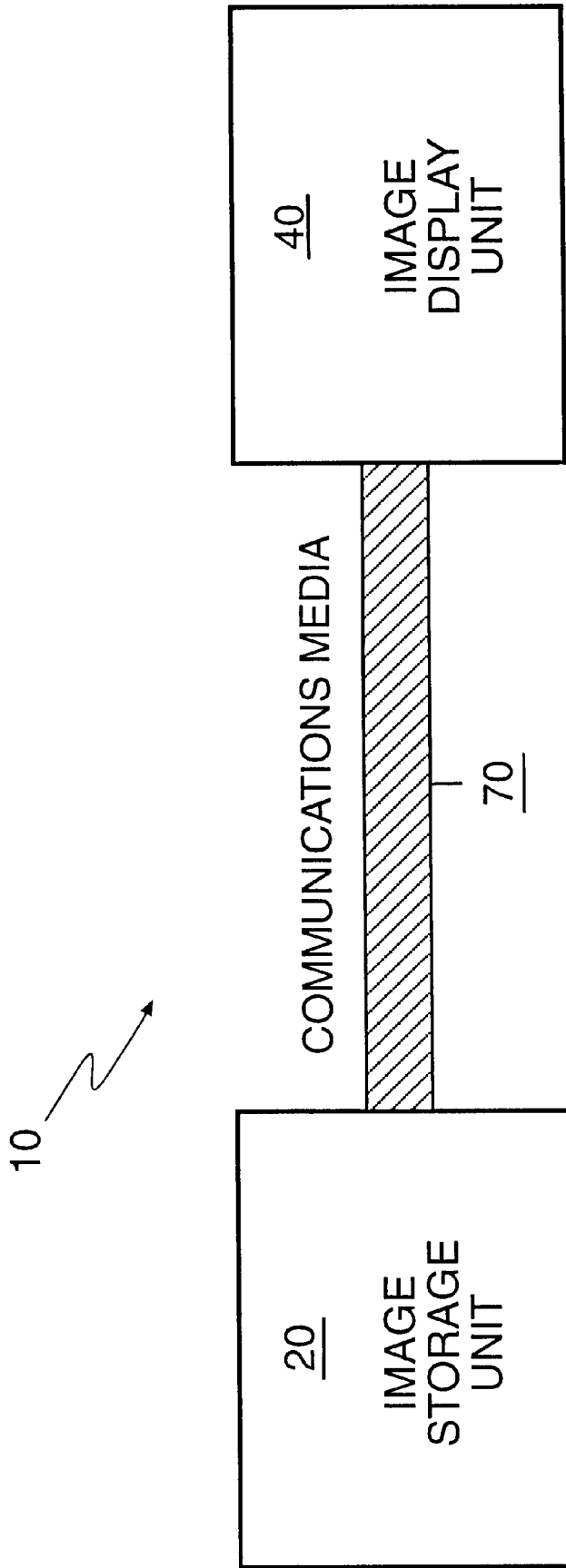
FIGURE 3

FIGURE 4

DOCKET ALARM
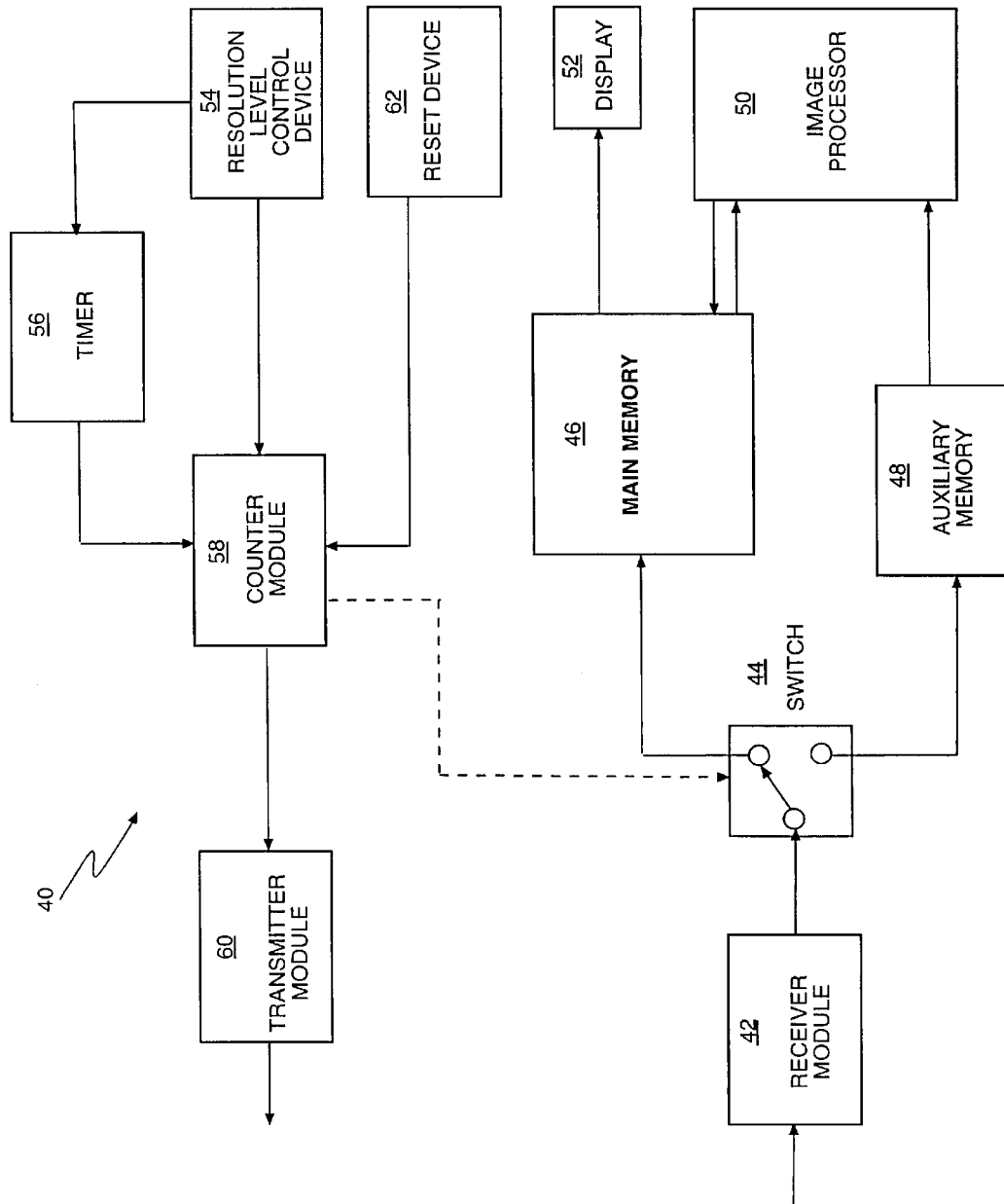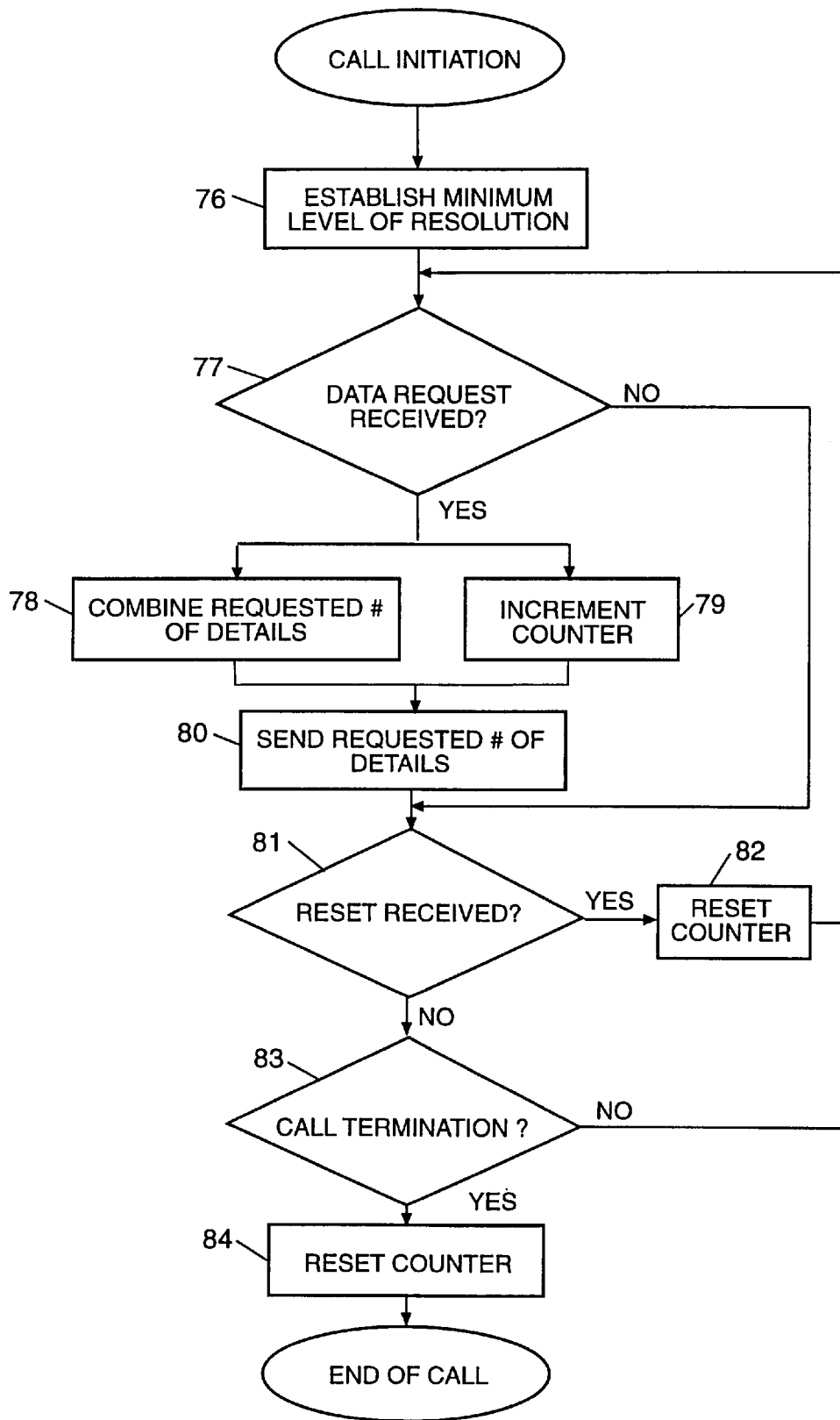
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