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# United States Patent [19]

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Hassan et al.

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- [54] **IMAGE COMMUNICATION SYSTEM AND METHOD**
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- [73] Assignee: **Lucent Technologies Inc.**, Murray Hill, N.J.
- [21] Appl. No.: **120,254**
- [22] Filed: **Sep. 13, 1993**
- [51] Int. Cl.<sup>6</sup> ..... **H04N 1/32**
- [52] U.S. Cl. .... **358/442; 358/400; 379/100; 348/18**
- [58] Field of Search ..... **358/400, 440, 358/468, 442, 909.1, 456, 457; 379/96-98, 100; 348/14, 17, 18; 370/94.1, 94.2, 95.1; H04N 1/00, 1/32**

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Primary Examiner—Kim Yen Vu  
Attorney, Agent, or Firm—Barry H. Freedman; Mark K. Young

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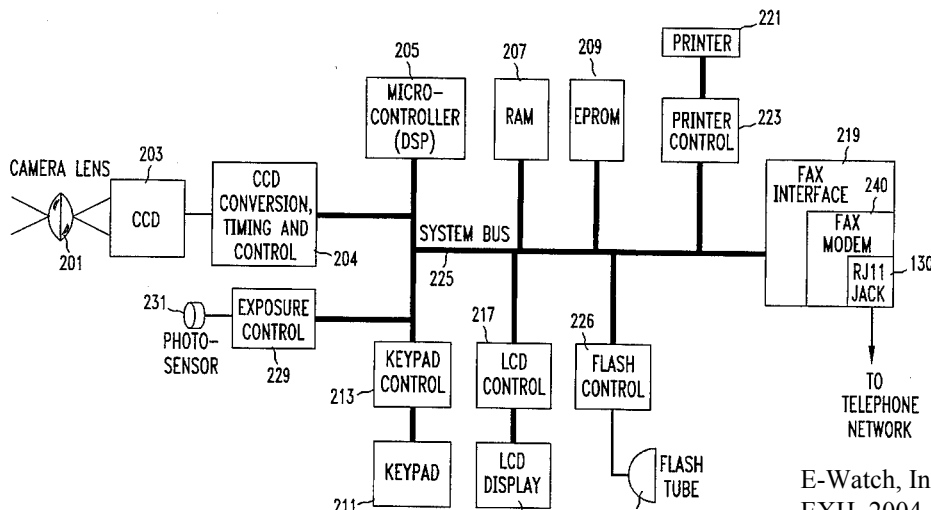
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### [57] ABSTRACT

An image communication system and method includes an image capture device which utilizes CCD technology to "take a picture", i.e., to capture an image, and then to generate a digital representation of that image which may be applied to a fax modem and then transmitted to a remote facsimile machine via a telephone communication link. The digital image is processed, such as by dithering, to enhance its presentability, so that shades of gray present in a conventional black and white photograph are converted to a pattern of black and white dots which retains the character of the original image in spite of subsequent facsimile transmission. The image capture device may include a printer and a memory for storing multiple images as well as the destination numbers of facsimile machines which are intended to receive copies of the images.

7 Claims, 4 Drawing Sheets



E-Watch, Inc.  
EXH. 2004

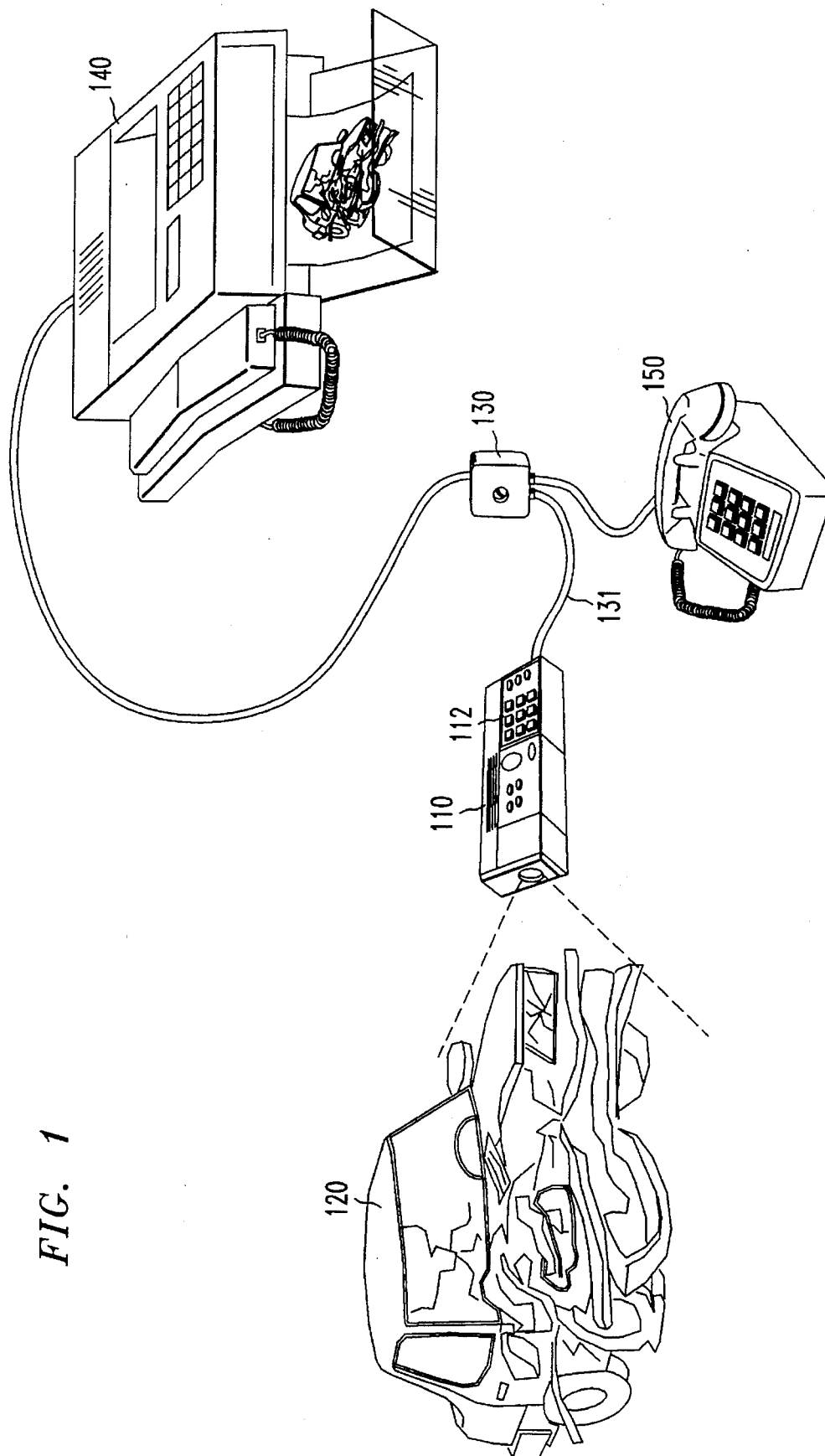


FIG. 1

FIG. 2

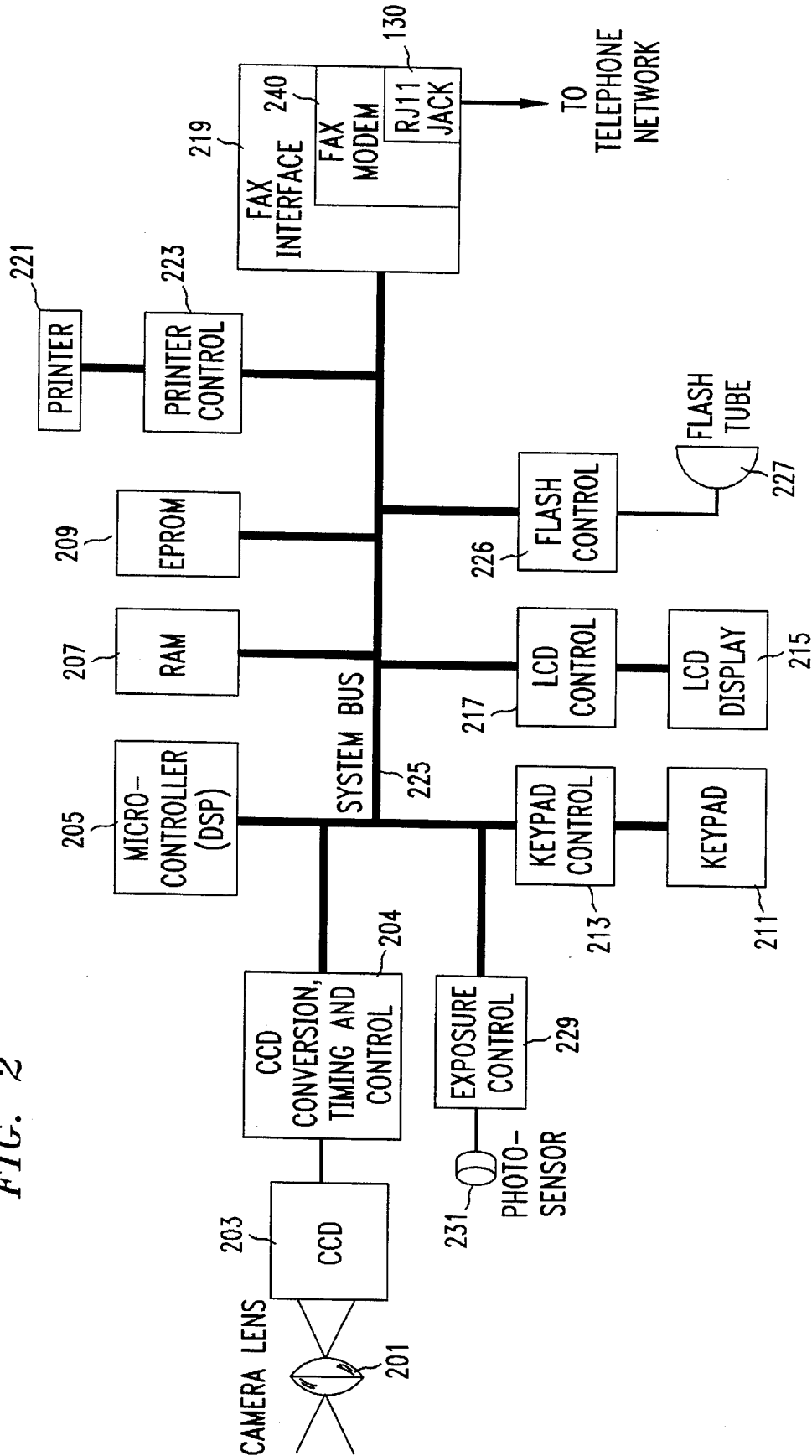
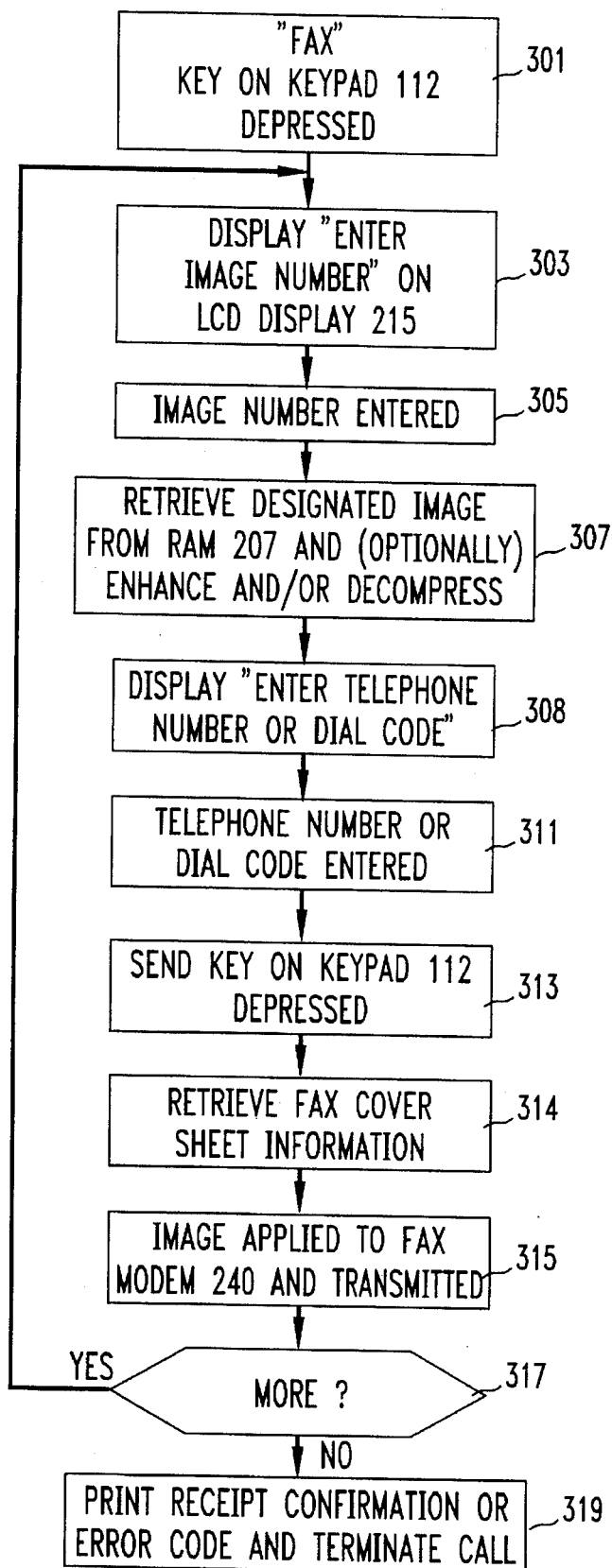
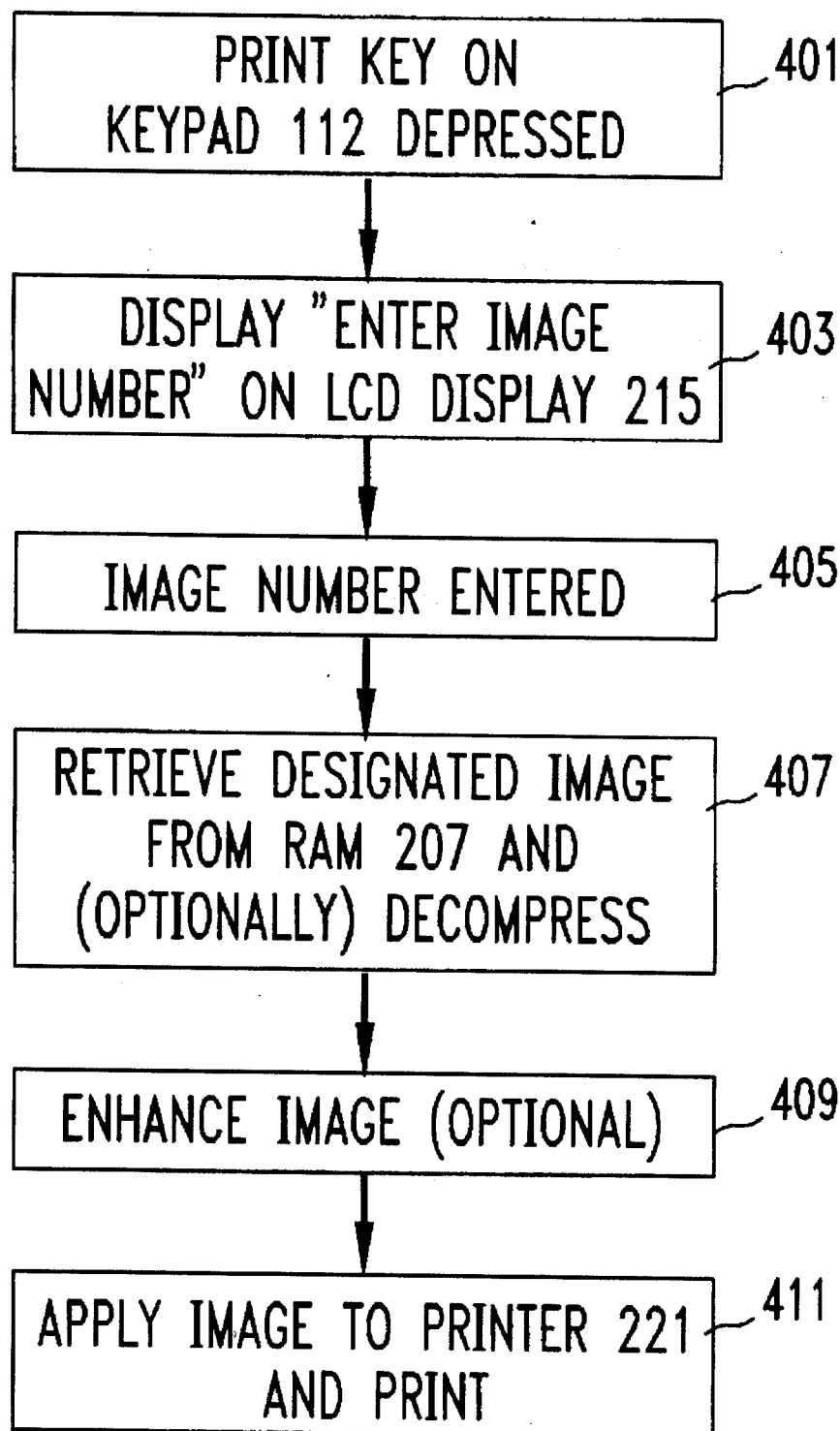


FIG. 3



*FIG. 4*

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