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(54) NETWORK-BASED SYSTEM ENABLING **IMAGE COMMUNICATIONS**

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(51) Int. Cl. ⁷ H04M 11/0

379/100.13

379/88.13, 88.14, 100.08, 100.09, 93.08;

707/523, 526

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ABSTRACT

A system is disclosed which enables a multitude of dissimilar end-system devices, appliances, and platforms to interchange image information. The inventive method utilizes a directory database of end-user profiles, a session manager, a conversion manager, individual conversation processors, a queuing database, and a store-and-forward file-folder database. The system accommodates pre-subscribed end-users as well as non-subscription users. The system handles both real-time and store-and-forward communications modes. The present invention may be practiced as either a one-node or a multi-node distributed architecture, scalable as required, and may be either network-based or premises-based, or a hybrid combination of these. Communications transport both into and out of the node(s) can range from voiceband telephone on analog circuits to high speed channel or fact-packet protocol communications modes.

25 Claims, 9 Drawing Sheets

IMAGE COMMUNICATIONS SYSTEM OVERALL CONFIGURATION IMAGE CALL ORIGINATION IMAGE CALL TERMINATION **CALLING** CALLED DEVICE(S) DEVICE(S) ORIGINATING **TERMINATING** 30 **IMAGE IMAGE** \$ \$ IMAGE COMMUNICATIONS SESSION MANAGER (N) (M) 28 IMAGE FORMAT IMAGE AND SESSION **PROFILE** PROTOCOL CONVERSION STORAGE DATABASE CONTROL PROCESSOR CONVERSION CONVERSION CONVERSION **PROCESSOR PROCESSOR** PROCESSOR #n



FIG. 1ANETWORK-BASED IMAGE PROTOCOL
AND
FILE FORMAT DATABASE

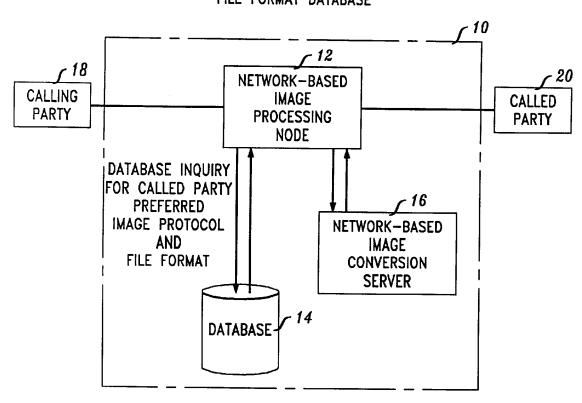
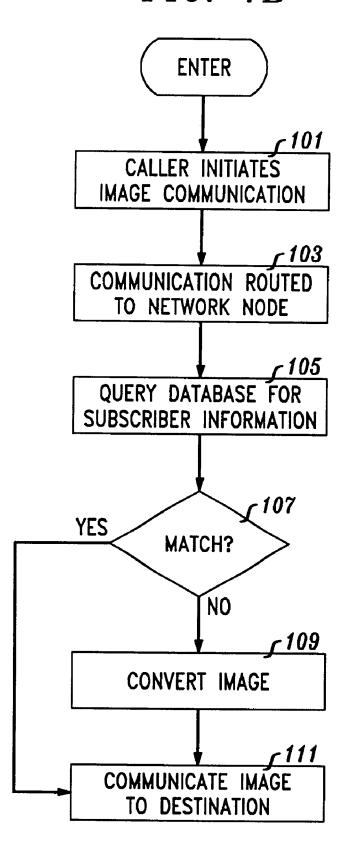




FIG. 1B





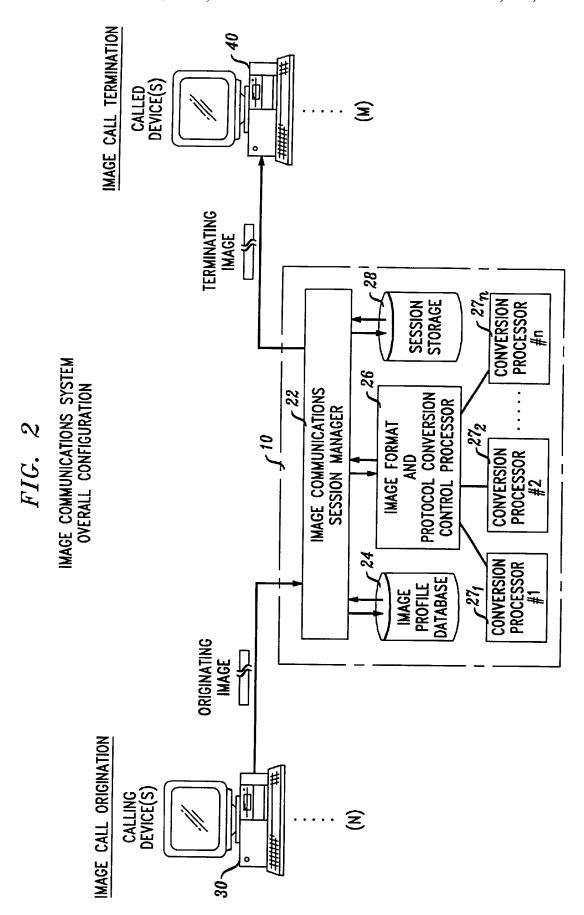


IMAGE CALL TERMINATION CALLED DEVICE(S) $\widehat{\Xi}$ **TERMINATING** IMAGE 28 CASE 1: CALLING SUBSCRIBER WITH IMAGE FILE MATCH AND CONVERSION SESSION STORAGE **PROCESSOR** IMAGE COMMUNICATIONS SYSTEM REAL-TIME COMMUNICATIONS 22 PROTOCOL CONVERSION PROCESS CONTROLLER IMAGE FORMAT PROCESSOR #2 CONVERSION 3 CONVERSION PROCESSOR #1 **ATABASE** PROFILE 127 MAGE ORIGINATING IMAGE COMMUNICATIONS SESSION MANAGER IMAGE CALL ORIGINATION CALLING DEVICE(S) 2

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