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Kaczmarczyk

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(54) INTELLIGENCE ENGINE

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(US)

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(US)

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patent is extended or adjusted under 35

U.S.C. 154(b) by 858 days.

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(52) **U.S. Cl.** **370/354**; 379/201.02

379/218.01, 219, 220.01, 221.03, 221.06, 379/221.08

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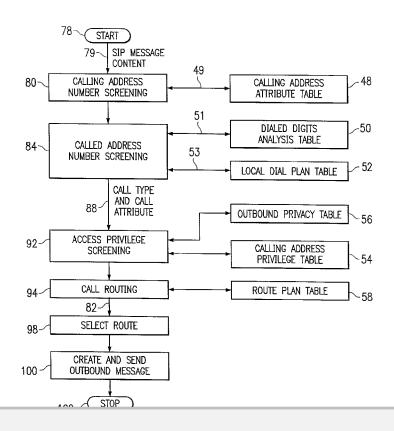
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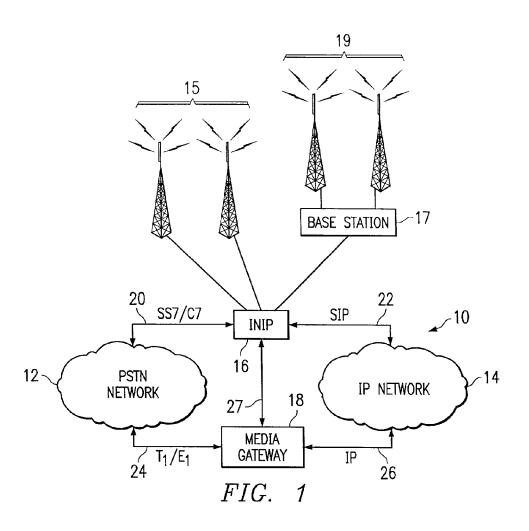
(57) ABSTRACT

One aspect of the invention is an intelligence engine. The intelligence engine includes a distributor layer operable to communicate with at least one call agent in a telecommunications network. The call agent may receive state-driven information associated with a call between an originator and a termination point. The intelligence engine also includes a telephony management layer. The telephony management layer is operable to receive a plurality of stateless requests from the distributor layer, access a database entry associated with the requests, spawn at least one request to obtain information associated with the originator and the termination point if necessary to route the call, and send the information to the call agent to route the call. In a particular embodiment, the intelligence engine further includes a facility management command and control layer. The facility management command and control layer is operable to receive an indicator signal associated with the call from the network. The call is controlled by the call agent. The facility management command and control layer is also operable to access a database entry associated with the call agent in response to the indicator signal and to reassign control of the call from the call agent to a second call agent.

31 Claims, 29 Drawing Sheets







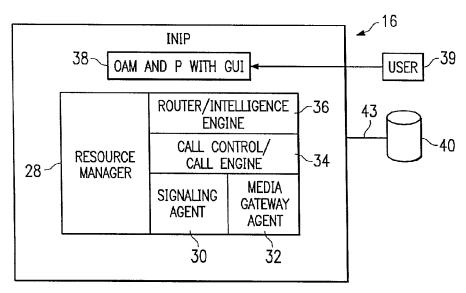
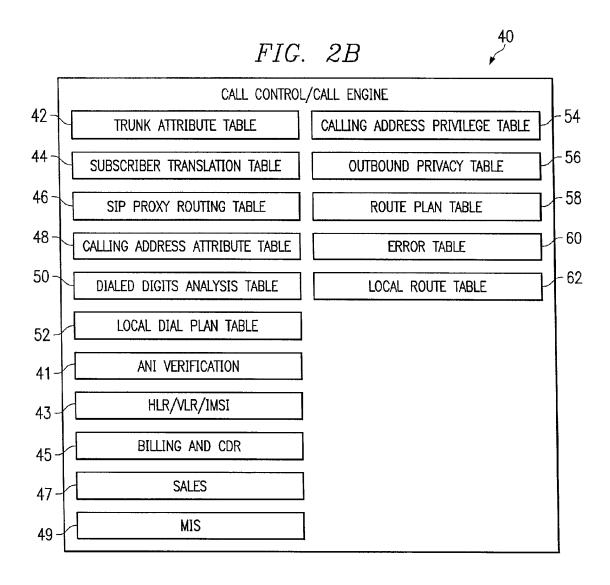


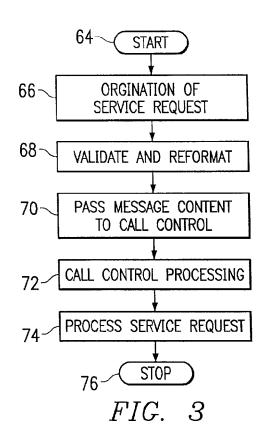
FIG. 2A







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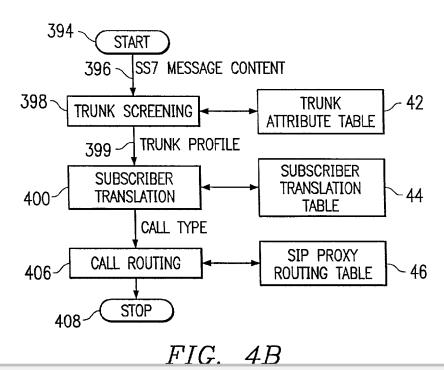




FIG. 4A START SIP MESSAGE 79~ CONTENT 49 CALLING ADDRESS CALLING ADDRESS - 48 80-NUMBER SCREENING ATTRIBUTE TABLE 51 DIALED DIGITS ~50 ANALYSIS TABLE CALLED ADDRESS 84-53 NUMBER SCREENING - 52 LOCAL DIAL PLAN TABLE CALL TYPE AND CALL 88-**ATTRIBUTE** OUTBOUND PRIVACY TABLE **~56** ACCESS PRIVILEGE 92-CALLING ADDRESS **SCREENING** PRIVILEGE TABLE CALL ROUTING ROUTE PLAN TABLE 82~ SELECT ROUTE 98 CREATE AND SEND 100 OUTBOUND MESSAGE **STOP** 102



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