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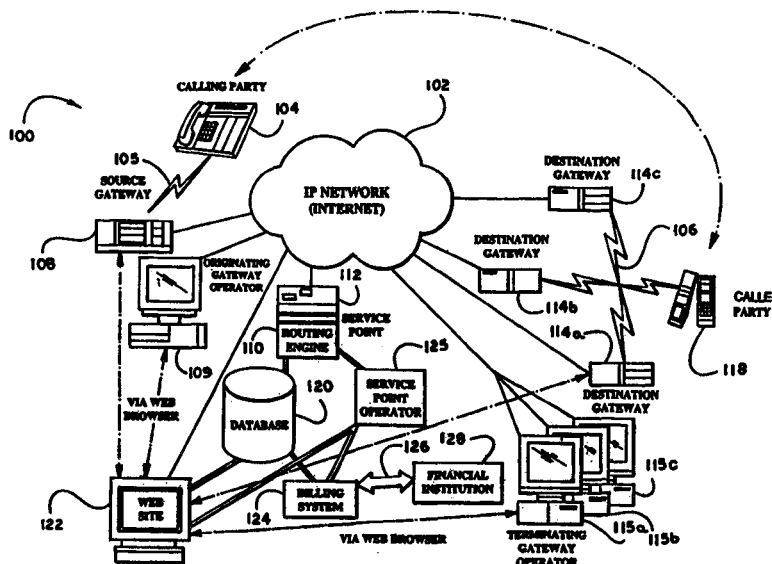
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(54) Title: INTERNET TELEPHONY CALL ROUTING ENGINE

(57) Abstract

The present invention discloses a centralized routing engine that is able to assist gateways in making routing decisions for calls being placed in an IP network environment. Types of call include voice, fax, video, etc. The routing engine provides significant flexibility to the gateways by allowing the gateways to designate preferences that define operational limits or requirements. A source gateway operator may set preferences such as the maximum price that is willing to be paid for a call, the maximum delay that will be tolerated and the maximum autonomous system hop count that will be tolerated. A destination gateway operator is likely only to be concerned with setting price schedules as preferences. Gateway operators may also set "preference criteria", which define the circumstances in which a certain set of preferences is to be applied. Based on preferences and preference criteria, the routing engine is able to locate destination gateways that are eligible to terminate a voice over telephony IP call. The routing engine provides a prioritized

list of eligible destination gateways to the source gateway. The source gateway then works through the prioritized list and attempts to set up the voice over IP telephony call with each eligible destination gateway, until the call is established.



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