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(54) **METHOD AND APPARATUS FOR PROVIDING MOBILE AND OTHER INTERMITTENT CONNECTIVITY IN A COMPUTING ENVIRONMENT**

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See application file for complete search history.

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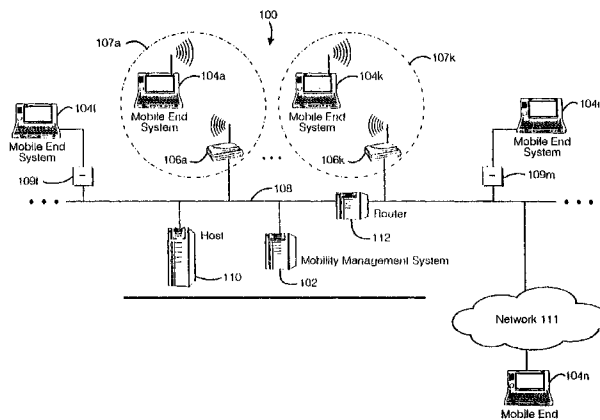(Continued)

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(57) **ABSTRACT**

A seamless solution transparently addresses the characteristics of nomadic systems, and enables existing network applications to run reliably in mobile environments. A Mobility Management Server coupled to the mobile network maintains the state of each of any number of Mobile End Systems and handles the complex session management required to maintain persistent connections to the network and to other peer processes. If a Mobile End System becomes unreachable, suspends, or changes network address (e.g., due to roaming from one network interconnect to another), the Mobility Management Server maintains the connection to the associated peer task—allowing the Mobile End System to maintain a continuous connection even though it may temporarily lose contact with its network medium. An interface-based listener uses network point of attachment information supplied by a network interface to determine roaming conditions and to efficiently reestablish connection upon roaming. The Mobility Management Server can distribute lists to Mobile End Systems specifying how to contact it over disjoint networks.

105 Claims, 40 Drawing Sheets

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