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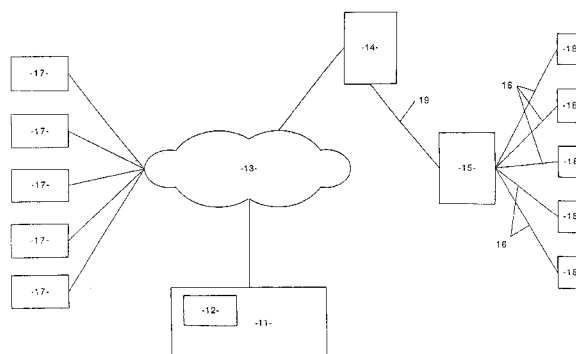
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(54) Title: INSTANT MESSAGING SYSTEM AND METHOD FOR REMOTE NETWORKS USING A SEQUENTIAL MESSAGE HANDSHAKING PROTOCOL



(57) Abstract: An instant messaging (IM) system and a method for communicating instant messages between an IM server (11) and a remote communication network utilising a sequential message handshaking protocol across a computer network that is prone to latency and instability. The remote communication network is a GSM network (16) having "Short Message Service" (SMS) for subscribers with mobile GSM devices (18) linked to a "Short Message Server Centre" (SMSC) for sending and receiving instant messages remotely of the GSM network (16) and as part of the IM system. The SMSC is provided with an SMSC server (15) connected by a highly stable link (19) with low latency to an SMSC buffer server (14) forming part of the computer network. The SMSC buffer server (14) is connected to the IM server (11) via the internet (13) to complete the computer network. The SMSC buffer server (14) provides for sequential message handshaking that requires and provides a confirmation of receipt of message from the SMSC server (15), and is provided with a buffer to facilitate storage of received instant messages received from the SMSC server (15). Delays are mitigated in the communication of instant messages between the SMSC server (15) and the SMSC buffer server (14), regardless of latency and instability associated with the internet. The SMSC buffer server (14) is also provided with a protocol that doesn't rely upon sequential confirmation of message transfer for communicating messages rapidly via the internet with the IM server, thereby accommodating latency and stability problems associated with the internet.