

modify the information or add some further information before relaying the information in the SIP INVITE message to the T\_CSCF, or pass no CAMEL-related information it received in the SIP INVITE message to the T\_CSCF. For example, the I\_CSCF may receive the CAMEL call reference number from the O\_CSCF in the SIP INVITE message and add only the address of the I\_CSCF to the SIP INVITE message before sending it to the T\_CSCF.

**[0054]** Although the invention has been described above assuming that the CAMEL-related information is transmitted in a SIP INVITE message, it is obvious to a person skilled in the art that CAMEL-related information may be added to a response message acknowledging the SIP INVITE message or a corresponding message invoking a session. The response message can be a final response, such as '200 OK' or a provisional response, such as '100 Trying' or '183 Session progress'. In this embodiment the CAMEL-related information is added in a network node sending the SIP response message, such as the call state control function serving the terminating subscriber T\_CSCF. It is even possible to utilize both messages to transmit CAMEL-related information. For example, the I\_CSCF may add its address to the SIP INVITE message and the T\_CSCF may generate the CAMEL call reference number and add it to the response message acknowledging the SIP INVITE message.

**[0055]** Although the invention has been described above assuming that the address of the I\_CSCF is used instead of the address of the GMSC as mandatory CAMEL-related information, it is obvious to a person skilled in the art that the address of another network node, such as the T\_CSCF or O\_CSCF, may also be used instead of the address of the GMSC.

**[0056]** It will be obvious to a person skilled in the art that, as the technology advances, the inventive concept can be implemented in various ways. The invention and its embodiments are not limited to the examples described above but may vary within the scope of the claims.

What is claimed is:

**1.** A method for providing a network node with service reference information in an IP-based system using an IP telephony signalling protocol, wherein the method comprises the steps of:

adding service reference information to an IP telephony signalling protocol message; and

sending the IP telephony signalling protocol message to the network node.

**2.** A method according to claim 1, wherein said IP telephony signalling protocol message is a message initiating a session.

**3.** A method according to claim 1, the method further comprising the steps of:

routing a call to the network node via an entry point; and  
performing said adding in the entry point.

**4.** A method according to claim 3, wherein at least the address of the entry point is added as service reference information to the IP telephony signalling protocol message.

**5.** A method according to claim 1, wherein said service reference information is CAMEL-related information, the method further comprising the steps of:

routing a call to the network node via an entry point;

generating a CAMEL call reference number for the call in the entry point; and

adding at least the CAMEL call reference number as said service reference information to the IP telephony signalling protocol message in the entry point.

**6.** A method according to claim 1, wherein said service reference information is CAMEL-related information, the method further comprising the steps of:

routing a call to the network node via an entry point;

generating a CAMEL call reference number for the call in the entry point; and

coding the CAMEL call reference number and the address of the entry point to a digit string; and

adding at least the digit string as service reference information to the IP telephony signalling protocol message in the entry point.

**7.** A method according to claim 1, wherein said IP telephony signalling protocol message is a response message acknowledging a message invoking a session.

**8.** A method according to claim 7, the method further comprising the steps of:

receiving an IP telephony signalling protocol message in a network node serving a called subscriber; and

adding at least the address of said network node serving a called subscriber as service reference information to the response message.

**9.** A method according to claim 1, wherein said service reference information is CAMEL-related information and said IP telephony signalling protocol message is a response message acknowledging a message invoking a session, the method further comprising the steps of:

receiving an IP telephony signalling protocol message invoking a session in a network node serving a called subscriber;

generating a CAMEL call reference number for the call in said network node serving a called subscriber; and

adding at least the CAMEL call reference number as service reference information to the response message in said node serving a called subscriber.

**10.** A method according to claim 1, wherein said service reference information is CAMEL-related information and said IP telephony signalling protocol message is a response message acknowledging a message invoking a session, the method further comprising the steps of:

receiving an IP telephony signalling protocol message in a network node serving a called subscriber;

generating a CAMEL call reference number for the call in said network node serving a called subscriber;

coding the CAMEL call reference number and the address of said network node serving a called subscriber to a digit string; and