ABSTRACT

PROCESS FOR ASSESSING THE TRANSMISSION QUALITY OF A SPEECH TRANSMISSION LINE

The figure shows a speech transmission line. It goes from a telephone (11) of a private network (13) via telephone exchanges (14, 17) to a mobile node (19) with antenna (20) and via a radio communication link (22) to a mobile telephone (12). For the assessment of the given transmission quality, a mobile (31) and a stationary measuring unit (32) are provided, that are arranged near to the telephones (11, 12). One measuring unit (31, 32) transmits as test signal a predefined sequence of human language, which is headed by a synchronization pattern. The corresponding other measuring unit (32, 31) recognizes the synchronization pattern and determines by this the start time of the following sequence. This sequence is divided into a plurality of corresponding intermediate values, wherein time intervals are generated and their sound properties are digitized. The totality of the intermediate values is finally assessed by a neuronal network in such a way, that at the output the human understandable values "quality good, medium or bad" is outputed. Hereby it is important, that the neuronal network is trained in advance by data which has been assessed by test persons.

(Figure 1)