

Title (en)  
METHOD AND APPARATUS FOR APPLYING A USER SELECTED FREQUENCY RESPONSE PATTERN TO AUDIO SIGNALS PROVIDED TO A CELLULAR TELEPHONE SPEAKER

Title (de)  
VERFAHREN UND VORRICHTUNG ZUR VERWENDUNG EINES BENUTZERDEFINIERTEN FREQUENZGANGS FÜR DAS AUDIOSIGNAL AM LAUTSPRECHER EINES ZELLULAREN TELEFONS

Title (fr)  
PROCEDE ET APPAREIL POUR L'APPLICATION D'UNE COURBE DE REPONSE EN FREQUENCE SELECTIONNEE PAR L'UTILISATEUR A DES SIGNAUX AUDIO ENVOYES A UN HAUT-PARLEUR DE TELEPHONE CELLULAIRE

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Application  
**EP 97937094 A 19970731**

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Abstract (en)  
[origin: WO9805150A1] The cellular telephone (10) includes an equalization filter (54) for adjusting the frequency response pattern of an audio signal provided to the speaker (24). The equalization filter (54) operates in response to user control to allow the user to adjust the frequency response pattern as desired. In one specific embodiment, the cellular telephone (10) includes an equalization filter table (56) for storing sets of audio frequency filter parameters, and the user merely selects one of the sets of filter parameters by pressing a corresponding button on a front control panel (11) of the cellular telephone (10). In other embodiments, the cellular telephone (10) includes an equalizer scroll bar allowing a large number of sets of filter parameters to be accessed. The equalization filter (54) and the filter table (56) may form part of a digital signal processing unit (42) also including vocoder encoders (50) and decoders (52). By providing an equalization filter (54), a cellular telephone (10) user may adjust the frequency response pattern of received signals to compensate, for example, for local noise or for hearing abnormalities to thereby allow the user to hear the other party to a telephone call more clearly. Even in the absence of any significant noise and even for a user having normal hearing, the user may still gain at least a perceived listening improvement.

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IPC 8 full level  
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