

Abstract

**ARRANGEMENT FOR SUPPRESSING ECHOES
IN A DIGITAL PORTABLE TELEPHONE**

An echo suppression arrangement (340,370) for use in a digital portable
5 telephone (10,14) prevents sidetone echo appearing in the base unit (14) of the
telephone from being coupled to and emanating at the handset unit (10) of the
telephone. The echo suppression arrangement determines (in 340) the direction of
dominant speech signals appearing in the base unit while communicating with the
handset unit. These dominant speech signals either originate at the handset unit (10)
10 or at a remote telephone station (e.g. 11 or 12) and are received by the base unit (14)
over a telephone line connected to the base unit. If the dominant signal in the base
unit is from the handset unit, the echo suppressor arrangement inserts a
predetermined amount of loss (370) into a receive voice path which couples signals
to the handset unit. This prevents the sidetone echo from being produced in the
15 handset voice receiver when the user of the handset unit is speaking. If the dominant
signal is from the remote telephone station, however, the echo suppression
arrangement removes the predetermined amount of loss from the receive voice path.
This allows for normal receiver voice response at the handset unit. Since users of
the handset unit expect to receive some sidetone level, a desired level of normal
20 sidetone is provided locally in this handset unit.

This Sheet Has Been Replaced

