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United States Patent [19]

Ono

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[54] **NOISE SUPPRESSING TRANSMITTER AND NOISE SUPPRESSING METHOD**

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[30] **Foreign Application Priority Data**

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[51] **Int. Cl.^{6}** **H04B 15/00**
[52] **U.S. Cl.** **381/94.2**; 381/94.1
[58] **Field of Search** 381/66, 94.1, 94.2, 381/93, 71.1, 94.3, 83; 379/410, 406

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[57] **ABSTRACT**

Signals outputted from microphones **111** and **112** are inputted through filters **118** and **119** to noise suppressing sections A and B. One having smaller power is selected from output signals S**107***a* and S**107***b* by switching a selection switch SW in a signal power comparing section **117**, to which the output signals S**107***a* and S**107***b* have been inputted, and a transmission signal S**108** level-adjusted by a level adjuster is outputted. In the noise suppressing section A (similarly in the section B), microphone output signals S**102** and S**103** are processed by an adder **113***a* and a subtracter **114***a*, a signal S**105***a* outputted from the subtracter **114***a* is inputted to a subtracter **116***a* through a filter **115***a* having a transmission function Fa(z) decided by the positions of the microphones **111** and **112** and a noise suppression signal S**107***a* obtained by subtracting the signal S**105***a* from a signal S**104***a* outputted from the adder **113***a* is outputted.
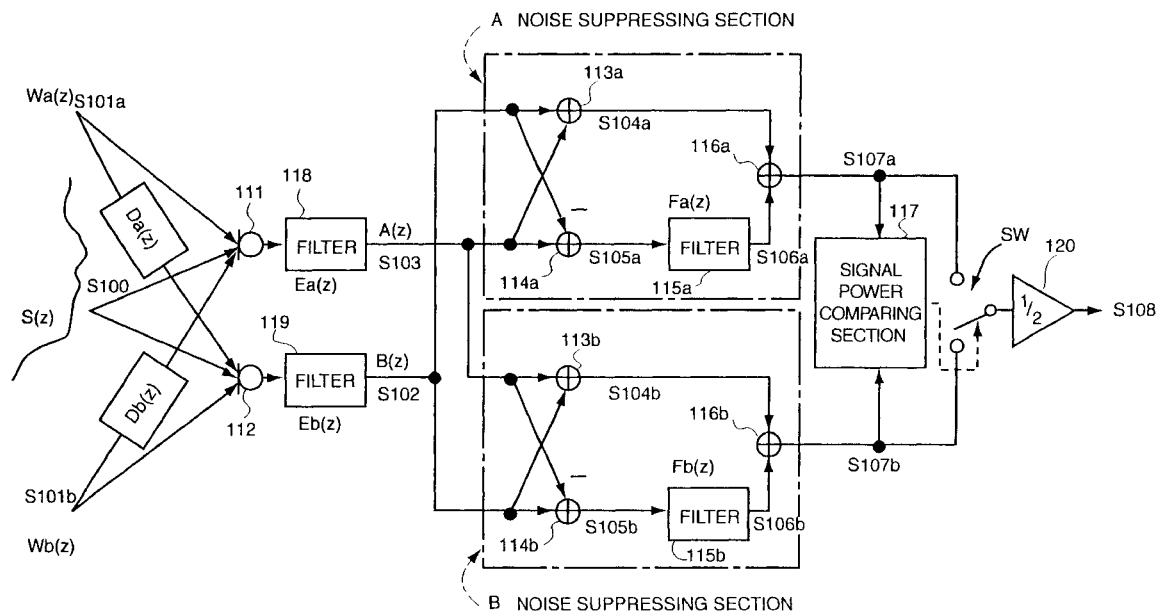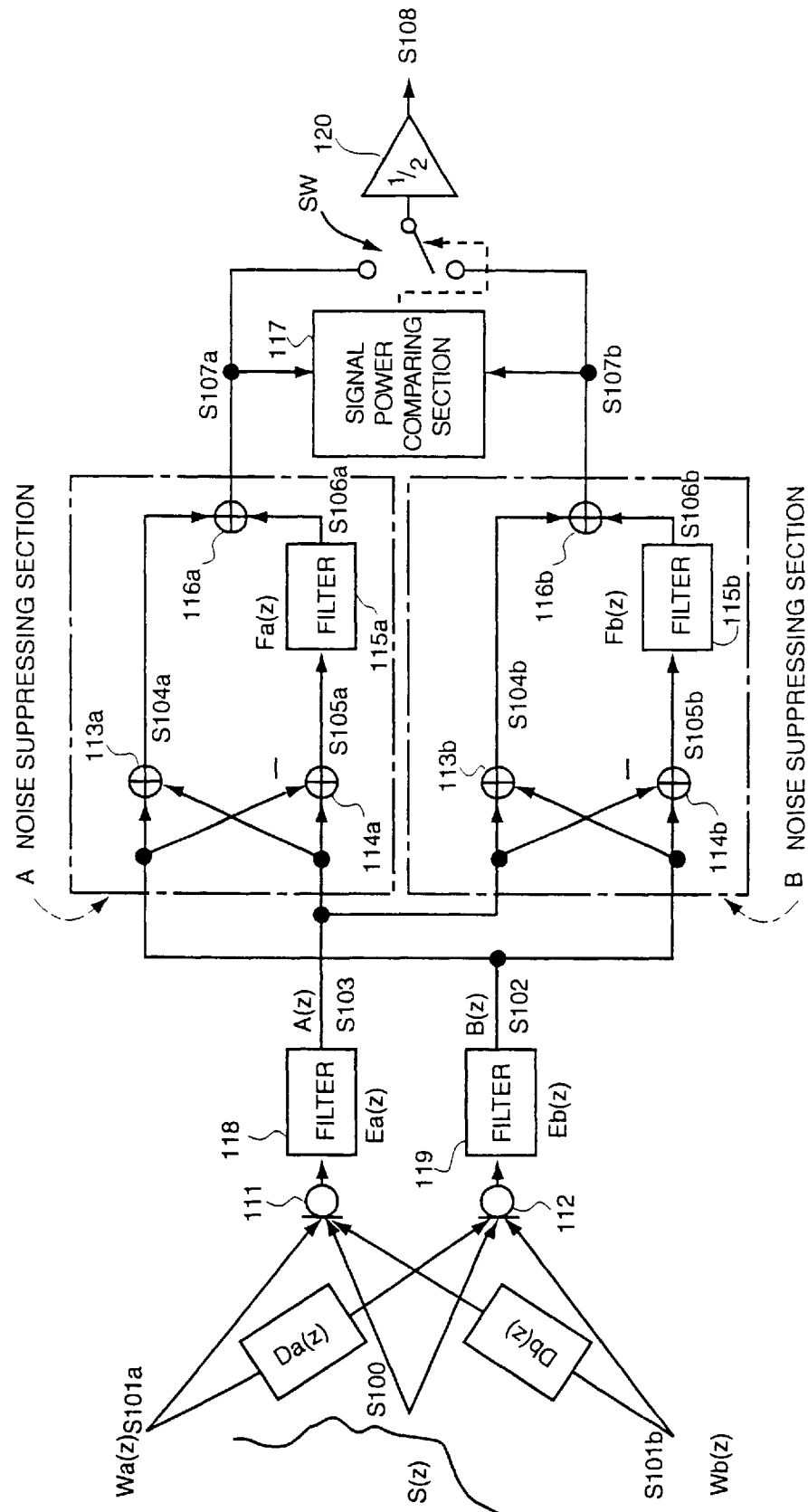
22 Claims, 8 Drawing Sheets

FIG.1

FIG.2

FIG. 3

112:MICROPHONE(2)

111:MICROPHONE(1)

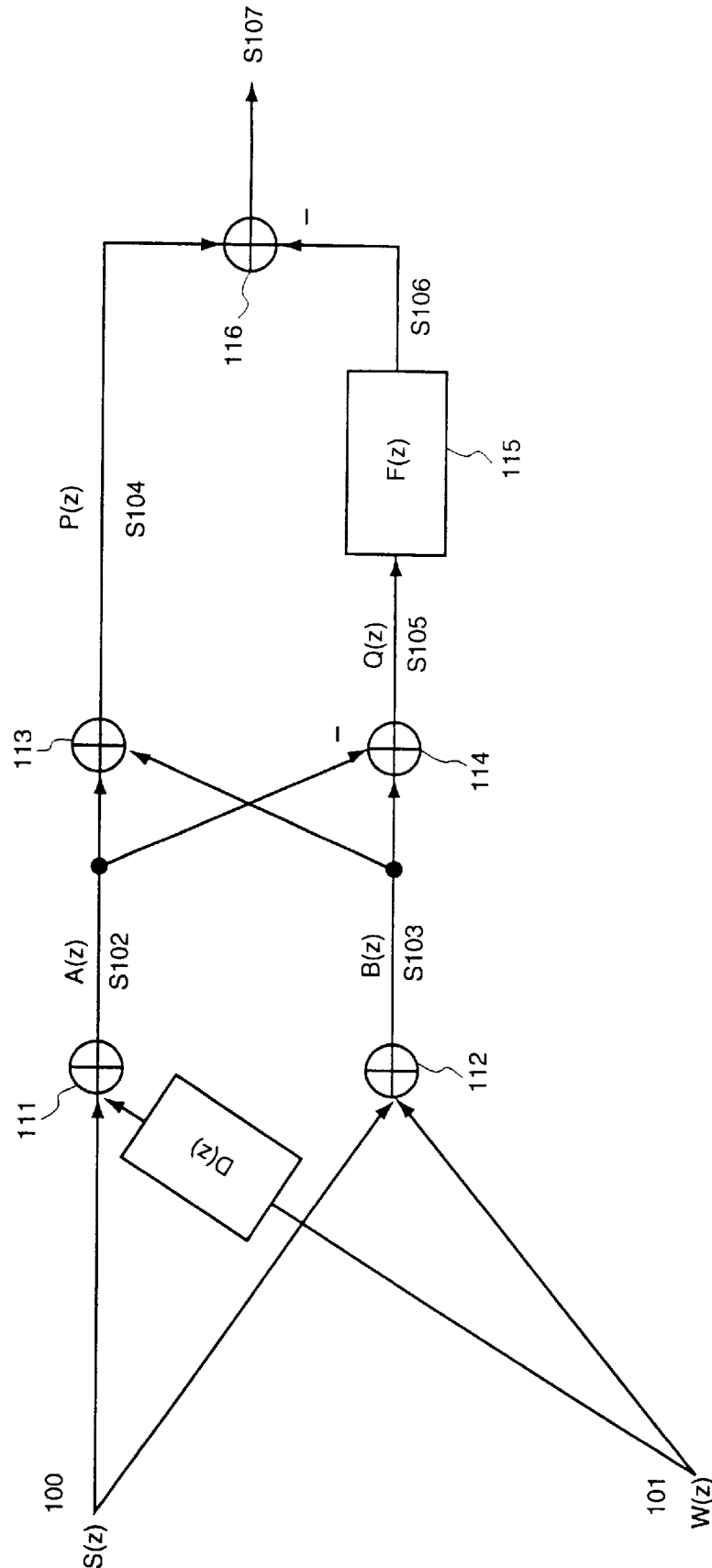FIG. 4

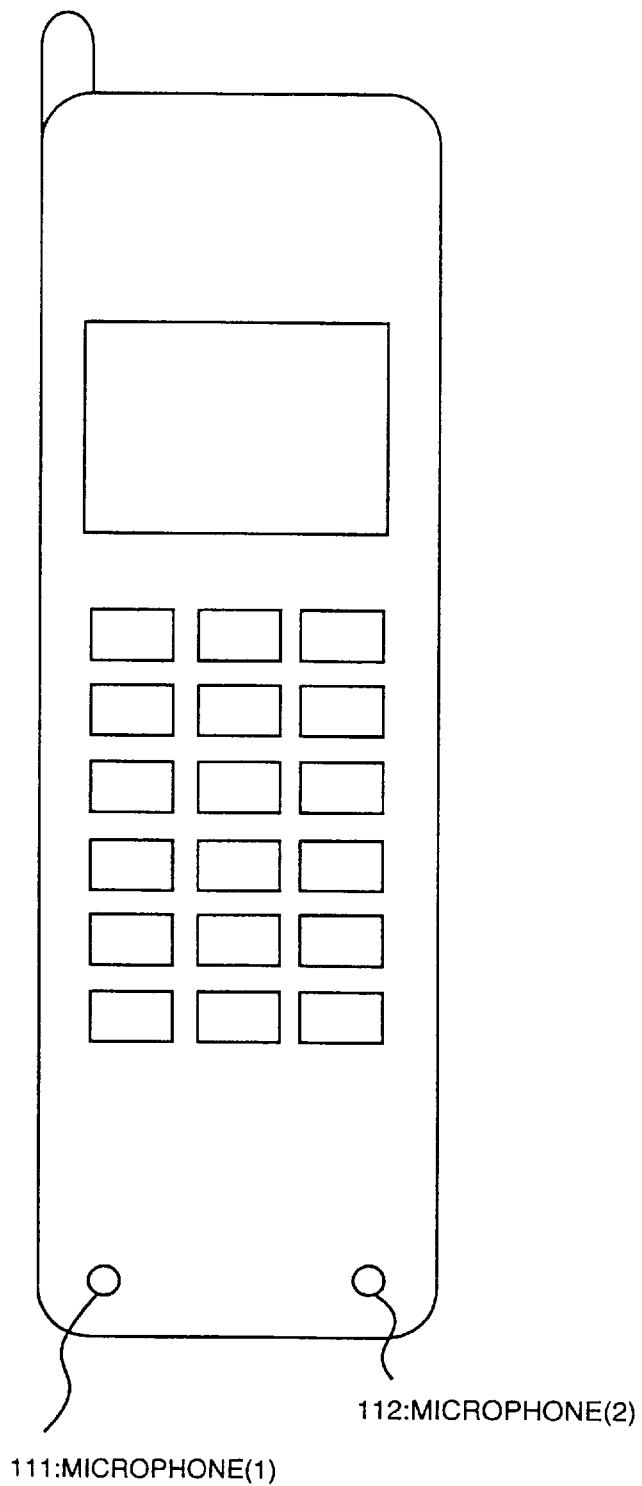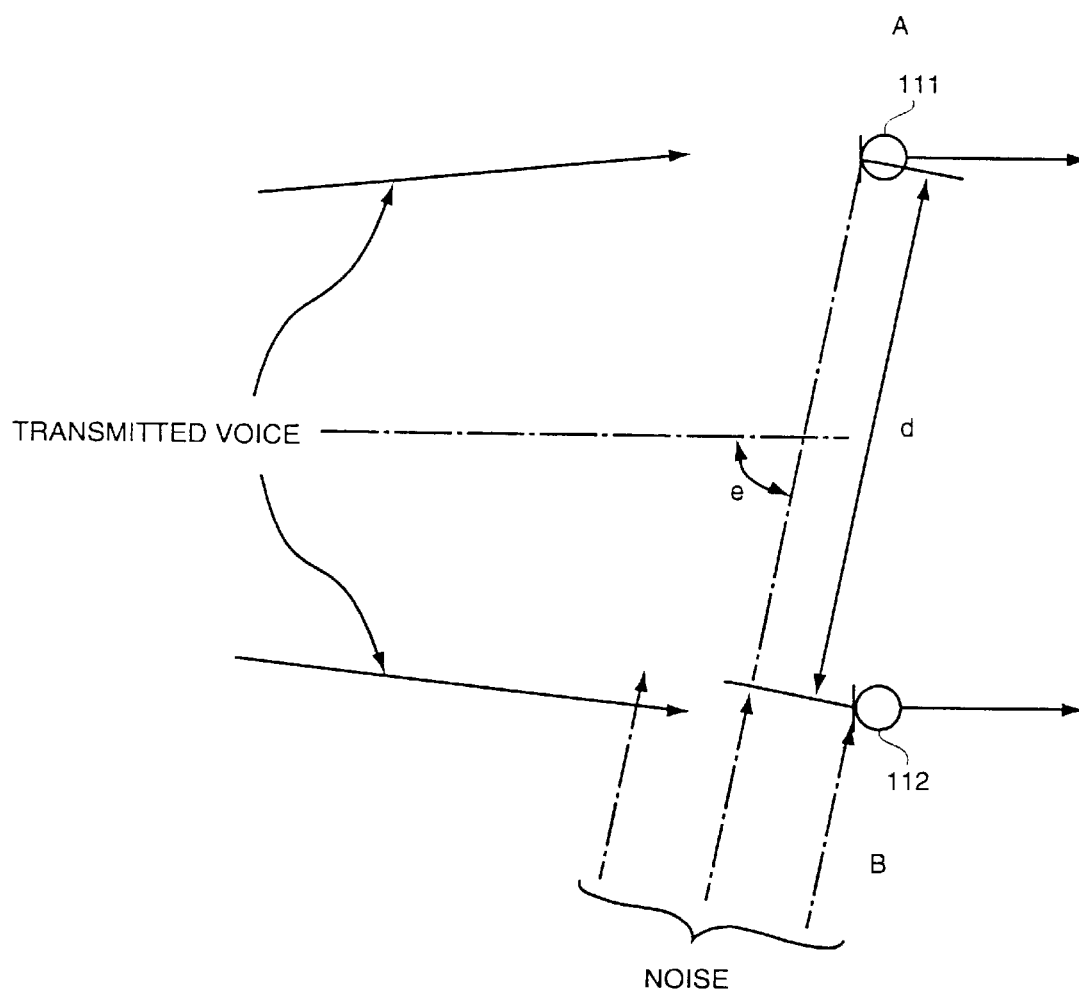
A

111

TRANSMITTED VOICE

d

e

112

B

NOISE

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