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Wu et al.

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(54) **COMMON-MODE NOISE SUPPRESSION FILTER**

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CPC . **H04B 3/14** (2013.01); **H03H 7/427** (2013.01)
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(58) **Field of Classification Search**
USPC 333/172
See application file for complete search history.

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(57) **ABSTRACT**

This invention provides a digital electronic device comprising: a grounded metal portion comprising a first metal plate electrically connected to ground and a first substrate disposed on the first metal plate; at least one layer of differential-mode reference metal portion comprising a second substrate and a second metal plate electrically connected to the first metal plate by at least one conductive structure; a pair of differential signal lines at least partially disposed on the second substrate of the at least one layer of differential-mode reference metal portion and electromagnetically coupled to the second metal plate of the at least one layer of differential-mode reference metal portion; and an equalizer electrically connected to the pair of differential signal lines.

9 Claims, 10 Drawing Sheets

