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(54) **DIGITAL VARIABLE GAIN ADJUSTMENT ON BASEBAND CHIP**

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(57) **ABSTRACT**

Embodiments of apparatus and method for digital variable gain adjustment (DVGA) are disclosed. In an example, a baseband chip includes an unpacking module, a symbol recording module operatively coupled to the unpacking module, and a first variable gain adjusting (VGA) module operatively coupled to the symbol recording module. The unpacking module is configured to unpack a plurality of symbols from a first representation of pseudo floating-point numbers to a second representation of fixed-point numbers. The symbol recording module is configured to obtain a symbol parameter based on the unpacking. The first VGA module is configured to dynamically adjust gains of the plurality of symbols having the second representation based on the symbol parameter.