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# United States Patent [19]

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Leitch et al.

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- [54] **VOICE COMPRESSION METHOD AND APPARATUS IN A COMMUNICATION SYSTEM**
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[73] Assignee: **Motorola, Inc.**, Schaumburg, Ill.

[21] Appl. No.: **764,656**

[22] Filed: **Dec. 11, 1996**

### Related U.S. Application Data

[63] Continuation of Ser. No. 395,747, Feb. 28, 1995, abandoned.

[51] Int. Cl.<sup>6</sup> ..... **H04B 7/00**

[52] U.S. Cl. .... **364/514 R**; 370/109; 455/54.1; 455/70; 381/29; 381/34

[58] **Field of Search** ..... 381/29, 30, 35, 381/36, 37, 34; 364/514 R; 395/2.14, 2.12, 2.21, 2.24, 2.29; 340/825.44; 455/54.1, 70, 72, 109, 47, 38.1

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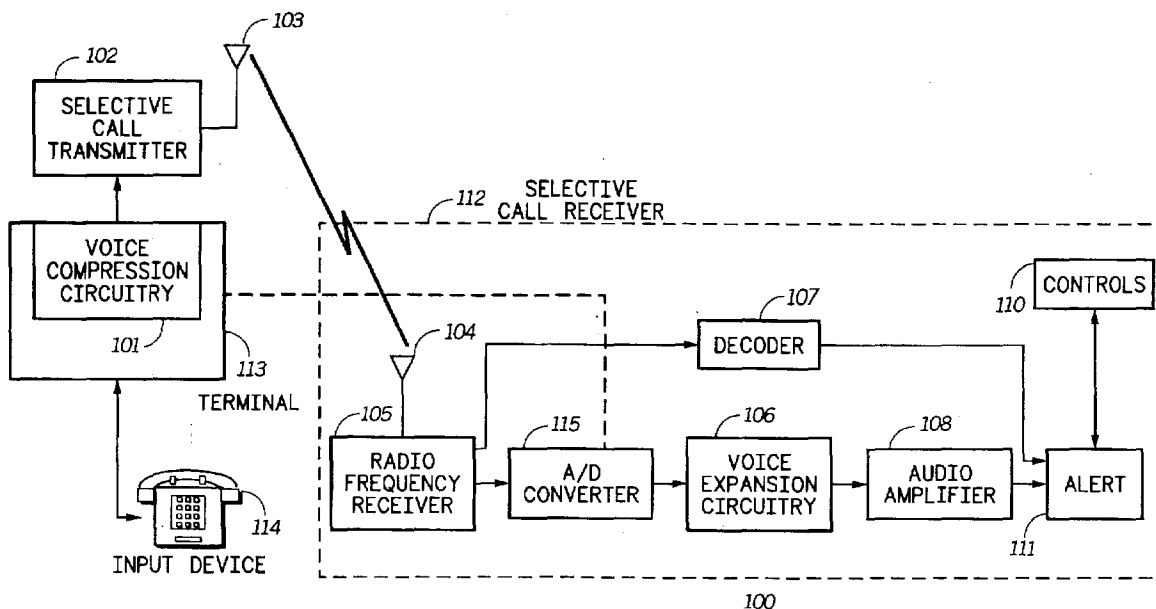
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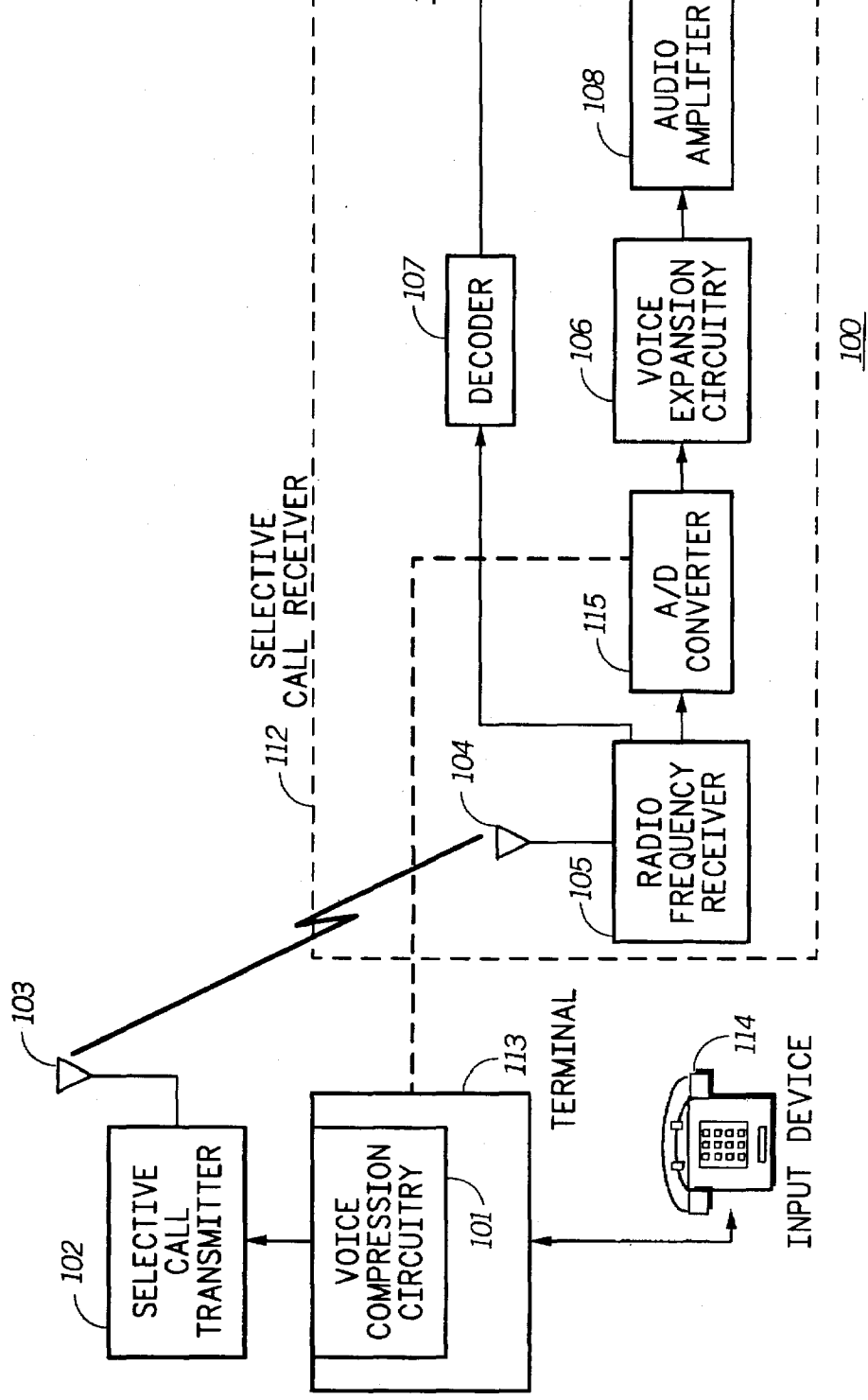
### [57] ABSTRACT

The present invention comprises a method for compressing a plurality of voice signals within a voice communication resource (see FIG. 6) having a given bandwidth within a voice communication system (100). The method comprises the steps of subchanneling the voice communication resource into a plurality of subchannels (441, 442, 443), placing a pair of the plurality of voice signals (401, 402) on a subchannel (441); modulating the pair of the plurality of voice signals (401, 402) about a pilot signal (581) within the subchannel (441) using single sideband modulation; and compressing the time of each of the voice signals (401, 402) within the plurality of subchannels (441, 442, 443), wherein these step provide a compressed voice signal.

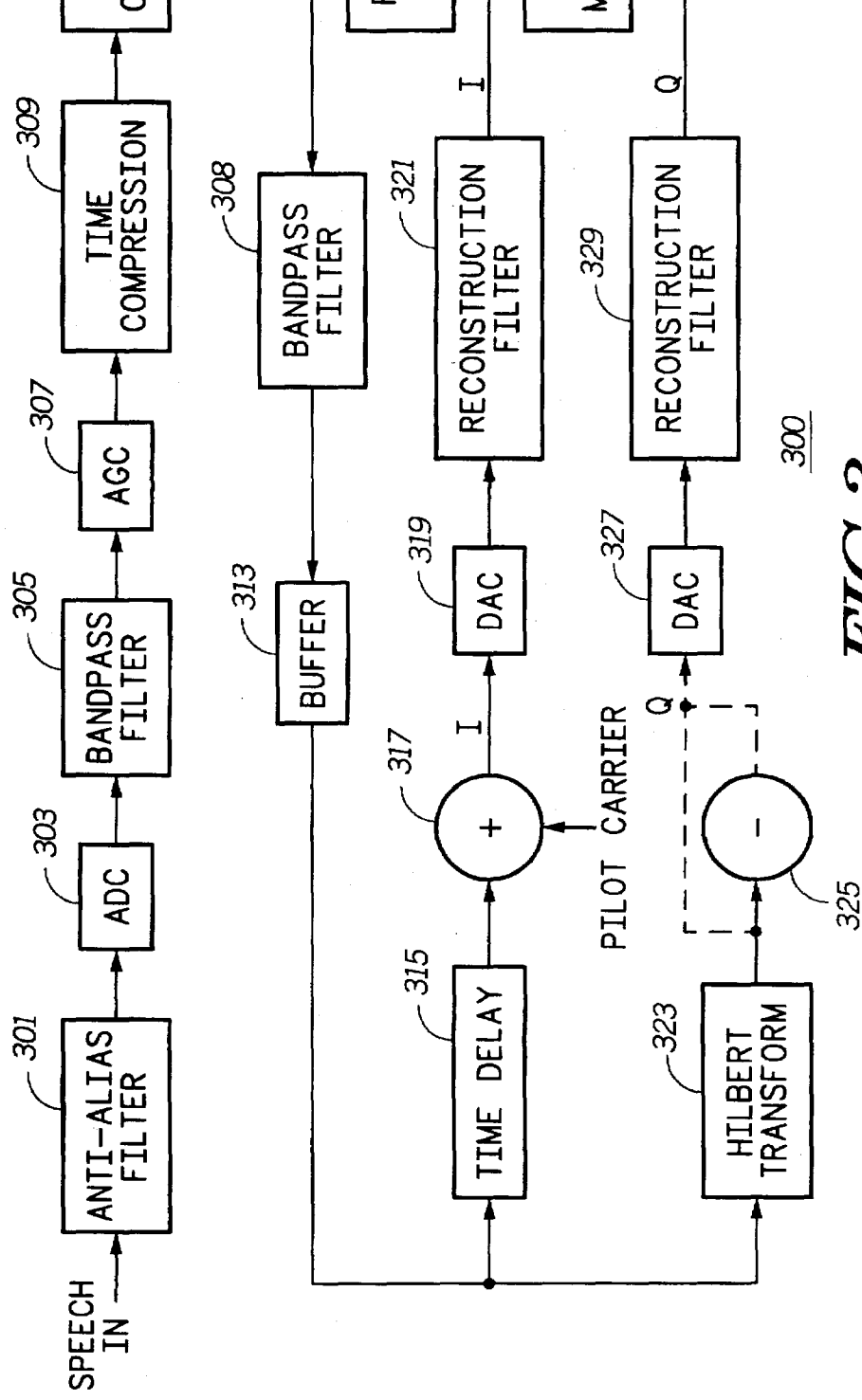
**20 Claims, 14 Drawing Sheets**



Apple Exhibit 1005



**FIG. 1**



**FIG. 3**

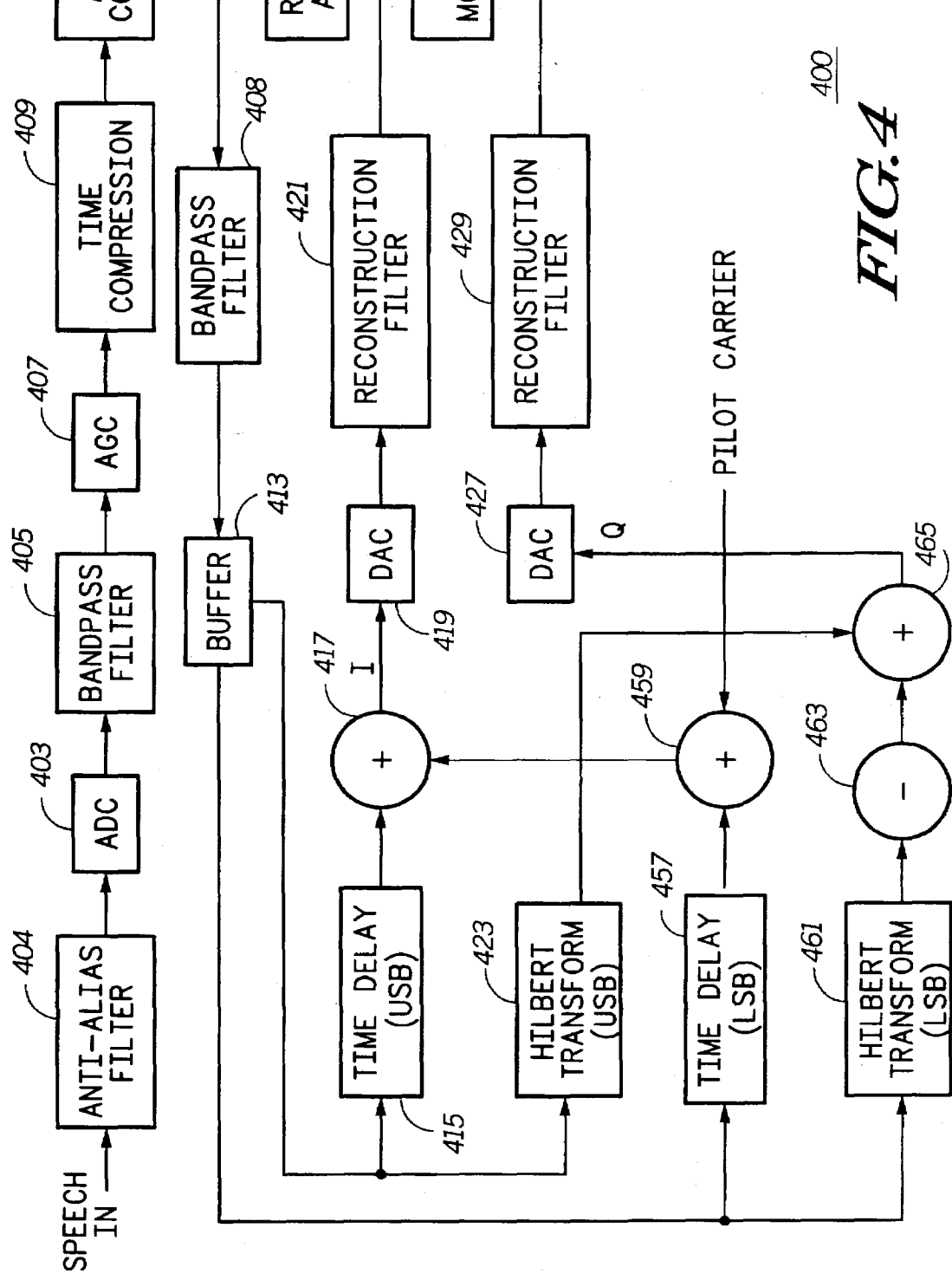
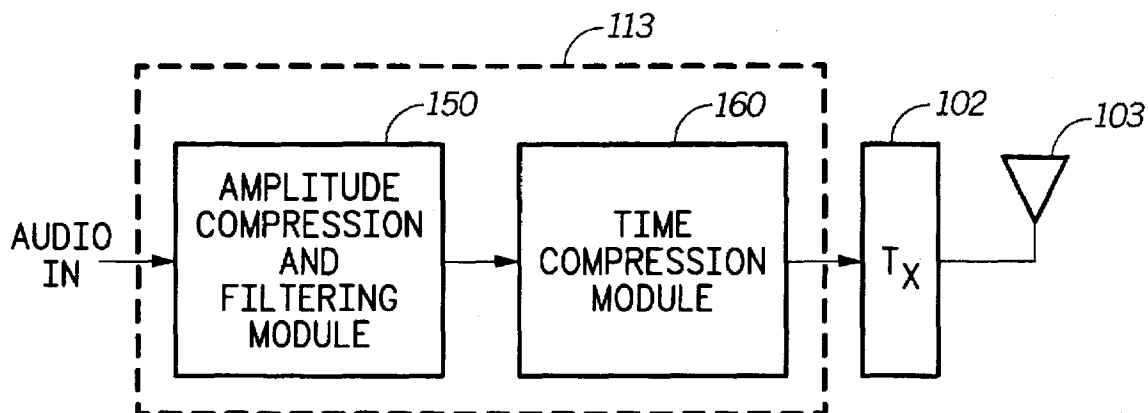
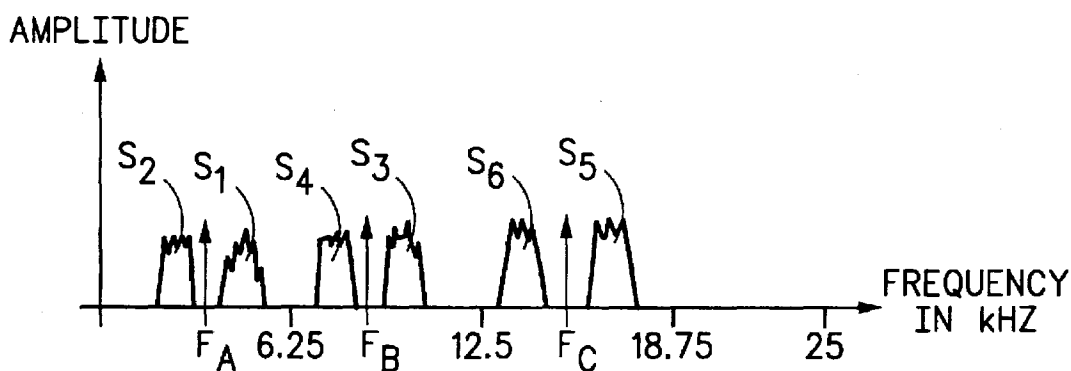


FIG. 4  
400



*FIG. 2*



*FIG. 6*

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