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# United States Patent [19]

Cameron et al.

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[54] **METHOD AND SYSTEM FOR PROVIDING MULTICARRIER SIMULCAST TRANSMISSION**

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[73] Assignee: **Destineer Corporation**, Jackson, Miss.

[21] Appl. No.: **08/899,476**

[22] Filed: **Jul. 24, 1997**

### Related U.S. Application Data

[63] Continuation of application No. 08/760,457, Dec. 6, 1996, abandoned, which is a continuation of application No. 07/973,918, Nov. 12, 1992, Pat. No. 5,590,403.

[51] Int. Cl.<sup>6</sup> ..... **H04B 1/50**

[52] U.S. Cl. .... **455/59; 455/102; 455/103**

[58] Field of Search ..... 455/502, 503, 455/507, 509, 515, 516, 517, 524, 59, 60, 62, 63, 67.1, 67.3, 67.6, 101, 102, 103; 375/260, 267, 299; 370/343, 344

### [56] References Cited

#### U.S. PATENT DOCUMENTS

3,488,445	1/1970	Chang .	
3,914,554	10/1975	Seidel .	
4,223,405	9/1980	Hattori et al. ....	455/59
4,244,047	1/1981	Perkins .	
4,392,242	7/1983	Kai .....	455/34.1

4,490,830	12/1984	Kai et al. ....	455/59
4,506,384	3/1985	Lucas .	
4,570,265	2/1986	Thro .....	455/59
4,701,758	10/1987	Dunkerton et al. .	
4,850,032	7/1989	Freeburg .	
4,968,966	11/1990	Jasinski .....	455/51.2
5,128,934	7/1992	Jasinski .	
5,163,181	11/1992	Koontz .	
5,243,629	9/1993	Wei .....	375/299
5,343,499	8/1994	Jasper et al. .	
5,392,452	2/1995	Davis .	
5,504,783	4/1996	Tomisato et al. ....	455/101

### FOREIGN PATENT DOCUMENTS

WO 90/04314	4/1990	European Pat. Off. .	
WO91/18458	11/1991	WIPO .....	455/101
WO92/11707	7/1992	WIPO .....	455/33.1

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### [57] ABSTRACT

A two-way communication system for communication between a system network and a mobile unit. The system network includes a plurality of base transmitters and base receivers include in the network. The base transmitters are divided into zonal assignments and broadcast in simulcast using multi-carrier modulation techniques. The system network controls the base transmitters to broadcast in simulcast during both systemwide and zone boundaries to maximize information throughout. The preferred mobile unit includes a noise detector circuit to prevent unwanted transmissions. The system network further provides an adaptive registration feature for mobile units which controls the registration operation by the mobile units to maximize information throughout.

**19 Claims, 30 Drawing Sheets**

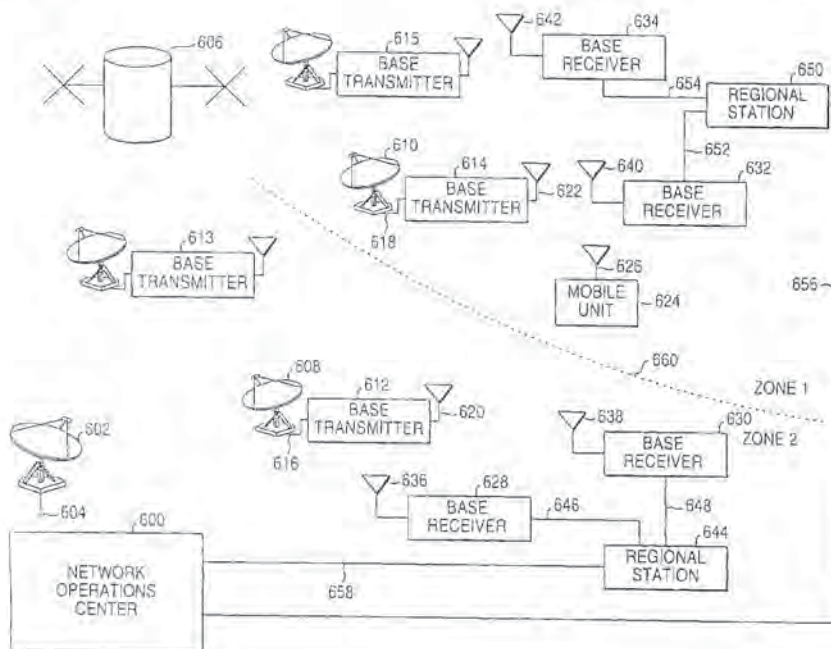
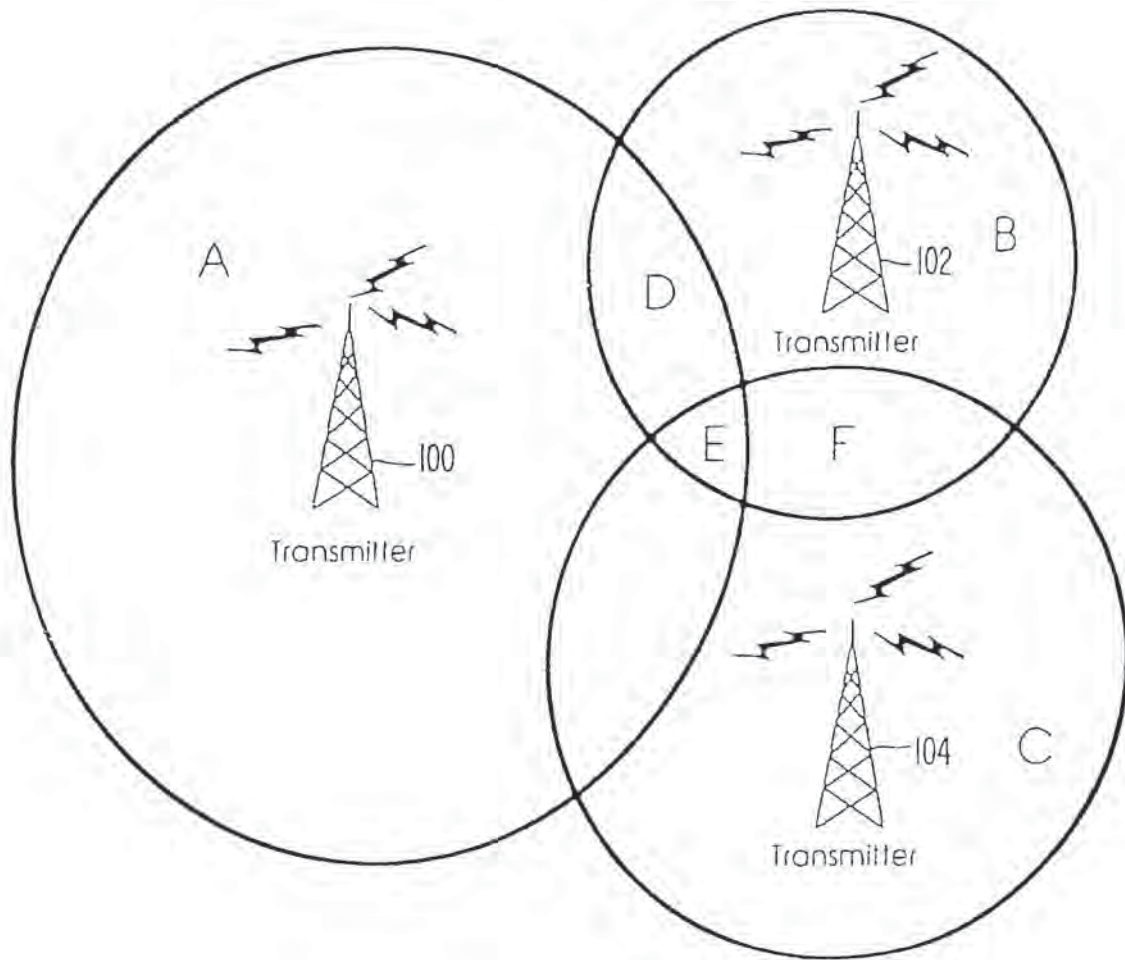


FIG. 1  
PRIOR ART



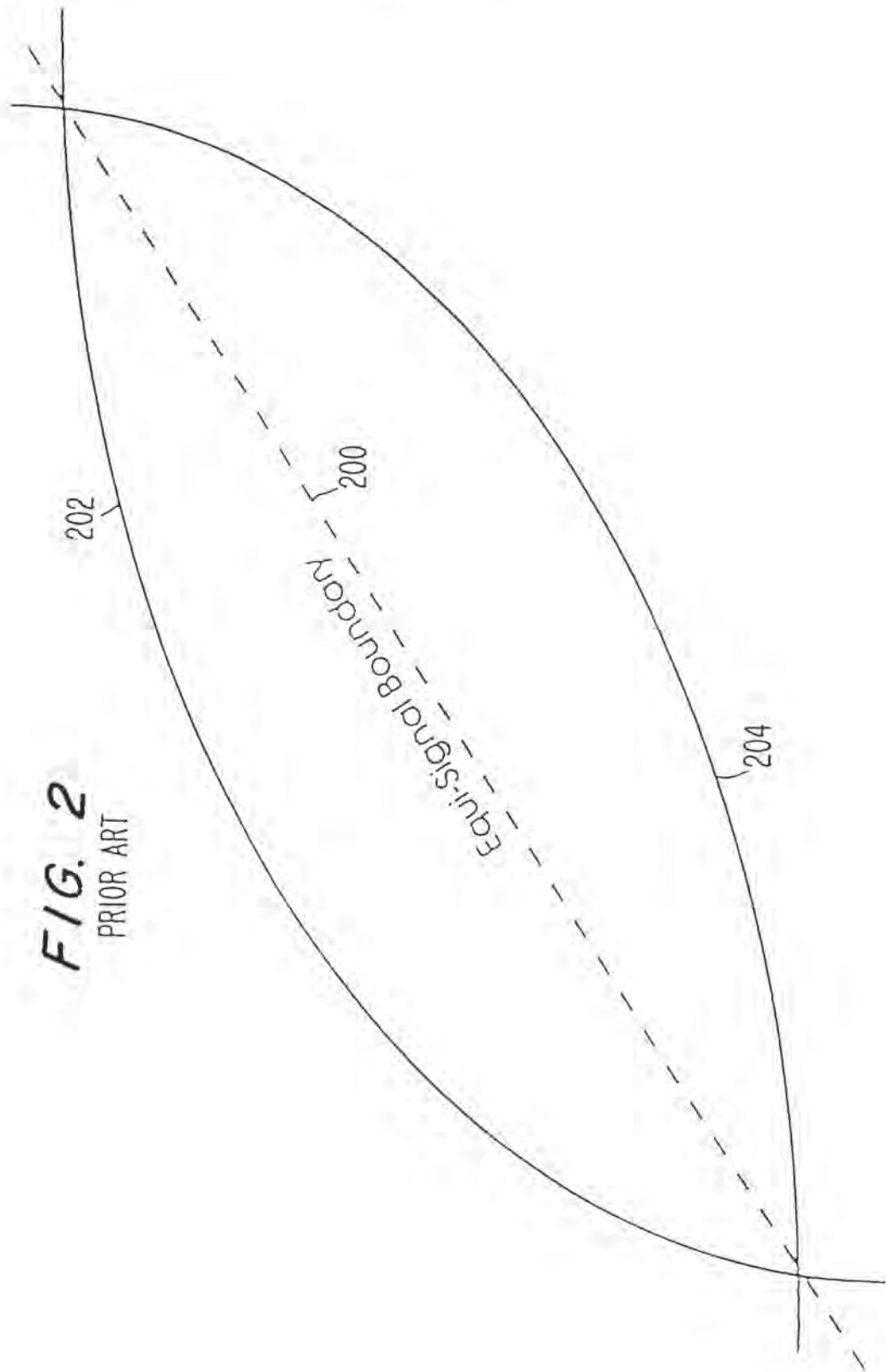
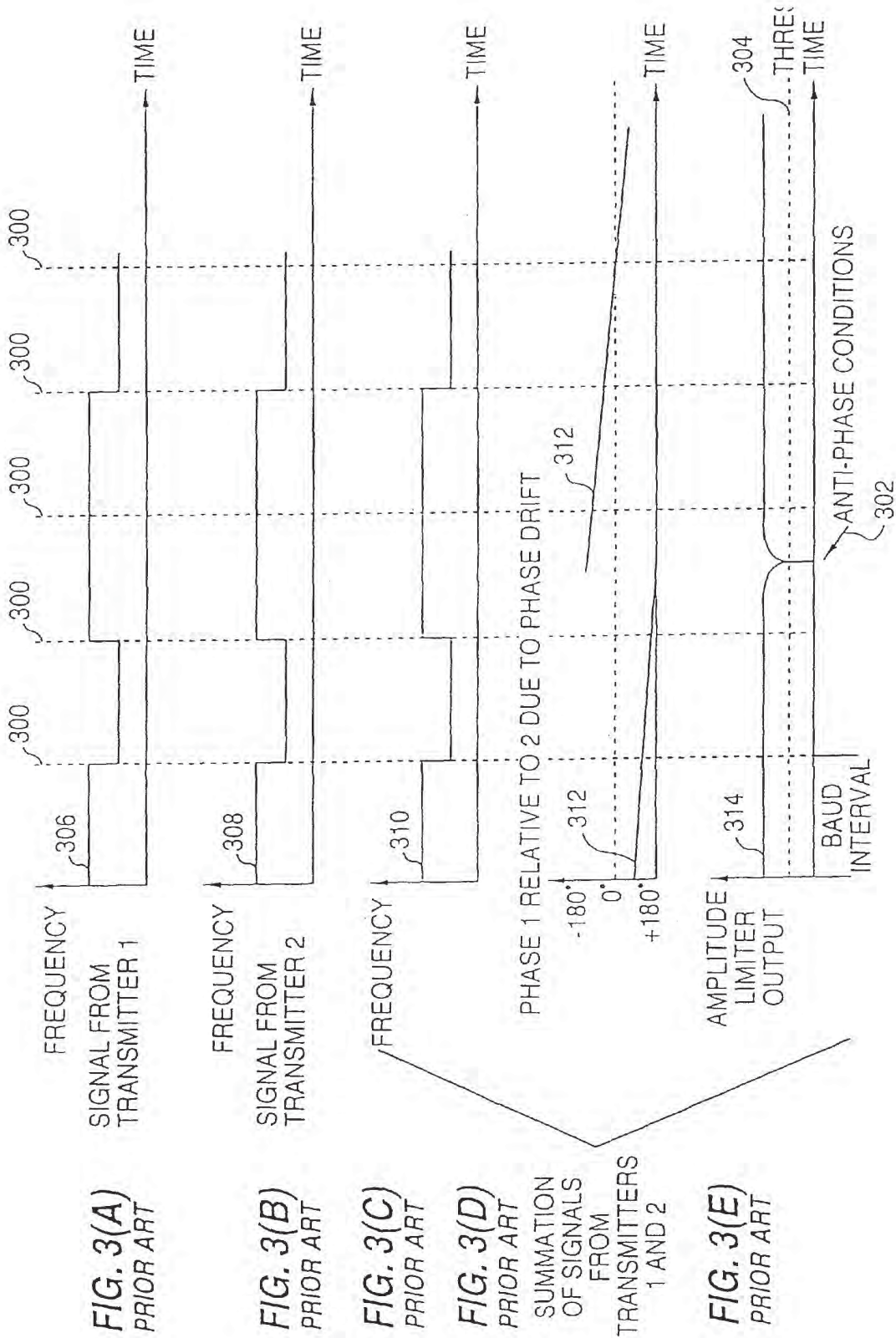
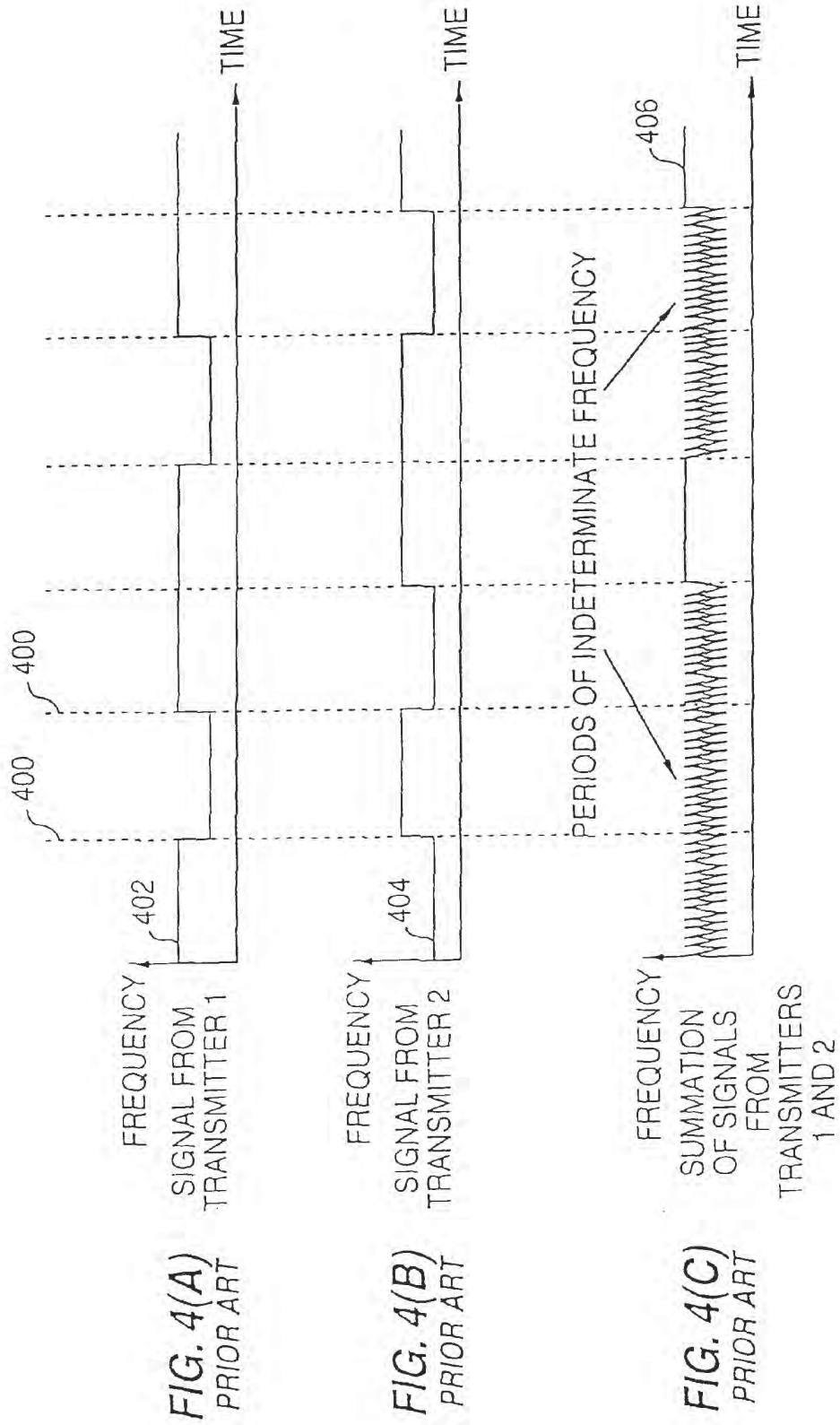


FIG. 2  
PRIOR ART







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