

**Patent Number:** 

# United States Patent [19]

### Langlet et al.

### [54] RADIO COMMUNICATION SYSTEM WITH **DIVERSITY RECEPTION ON A TIME-SLOT BY TIME-SLOT BASIS**

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- Appl. No.: 08/864,684 [21]
- [22] Filed: May 28, 1997
- [51] Int. Cl.<sup>6</sup> ..... H04Q 7/00
- [52]
- [58] 370/333, 334, 337, 264, 347

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Primary Examiner-Chi H. Pham

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### ABSTRACT

A communication system base station improves uplink coverage on a time slot by time slot basis. The coverage is improved by allocating diversity and non-diversity timeslots based on received signal quality of an RF link between a mobile station and a base station. The diversity time-slots are time slots during which information is received by more receiver branches than during the non-diversity time-slots.

### 32 Claims, 4 Drawing Sheets

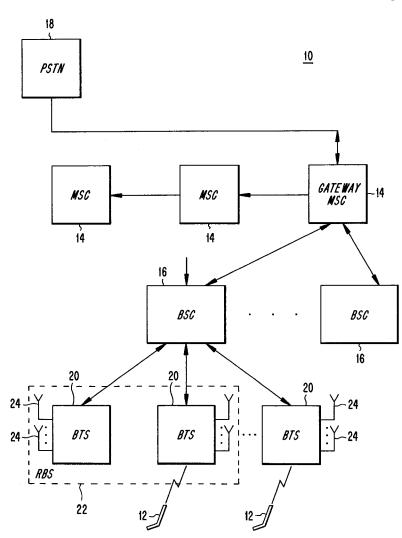


FIG. 1

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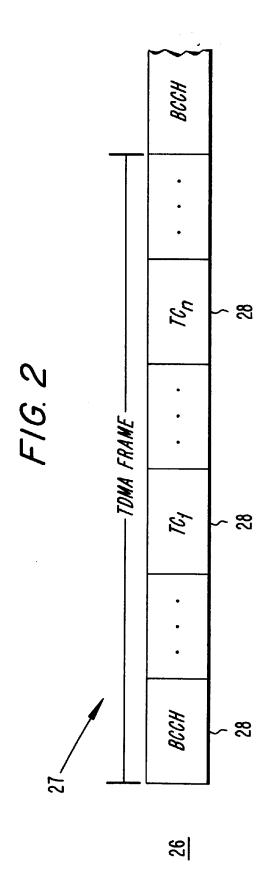
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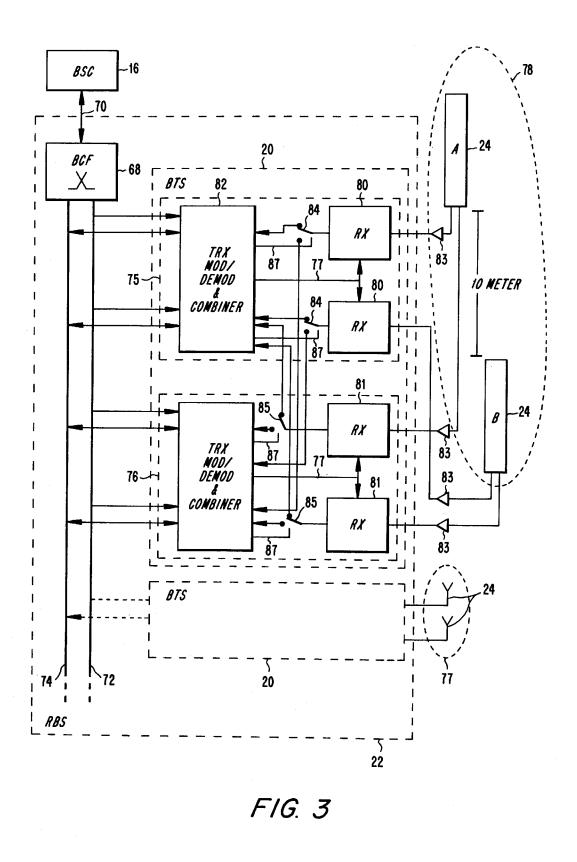
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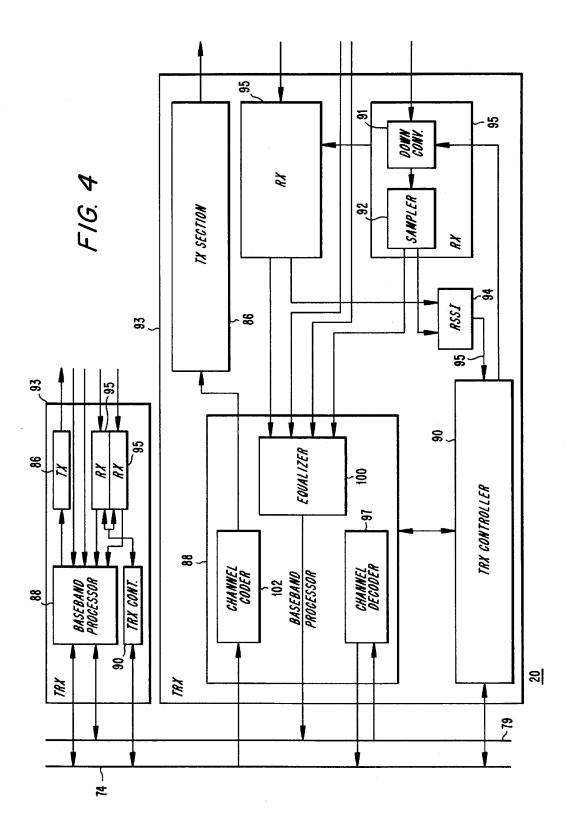


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