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(12) **United States Patent**  
**Dahod et al.**

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(54) **PROVIDING ADVANCED COMMUNICATIONS FEATURES**

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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **10/210,897**

(57) **ABSTRACT**

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**H04Q 7/00** (2006.01)

(52) **U.S. Cl.** ..... **370/328**; 370/349; 370/356;  
370/389; 370/401; 455/517

(58) **Field of Classification Search** ..... 370/312,  
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370/441, 466, 349, 390, 401, 338, 389; 455/524,  
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379/88.04, 88.16, 265.01, 265.02; 709/207,  
709/231, 238

See application file for complete search history.

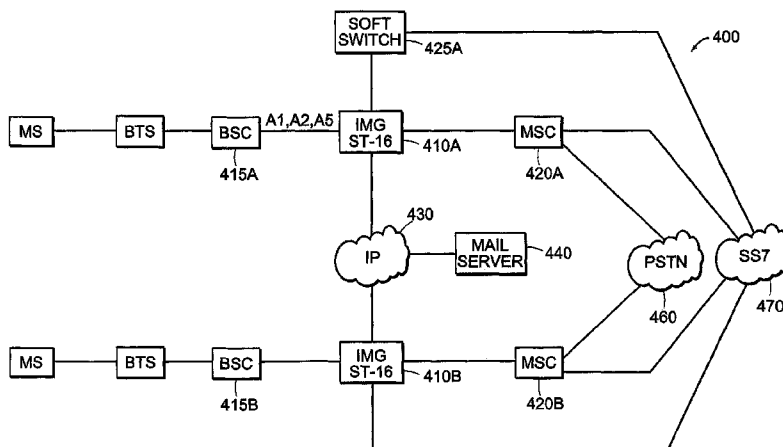
Advanced communications features are provided in a mobile communications network having at least one mobile switching center and at least one mobile station subsystem. The mobile switching center and mobile station subsystem each communicate signaling messages according to a mobile signaling protocol. An indication is received that a half-duplex mobile communications session is to be initiated between a first mobile station subsystem and a second mobile station subsystem. The first and second mobile station subsystems include full-duplex communications apparatus for use in full-duplex mobile communications sessions. The half-duplex mobile communications session relies on the first and second mobile station subsystems, and all of the reliance is only on the full-duplex communications apparatus. Mobile communications telephone calls are established with the first mobile station subsystem and the second mobile station subsystem. One of the first and second mobile station subsystems is selected as a voice signal source in the half-duplex communications session.

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**27 Claims, 13 Drawing Sheets**



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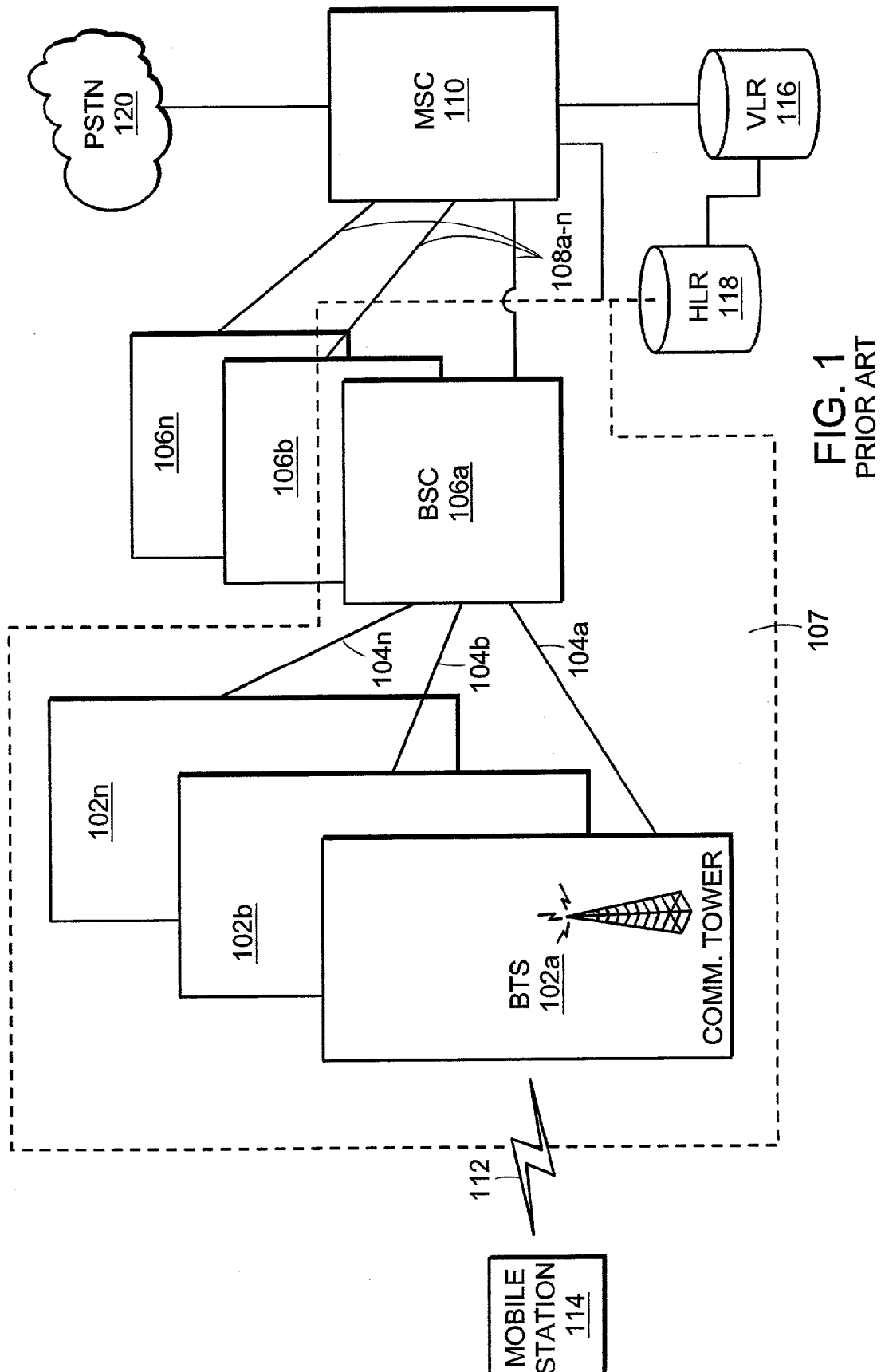


FIG. 1  
PRIOR ART

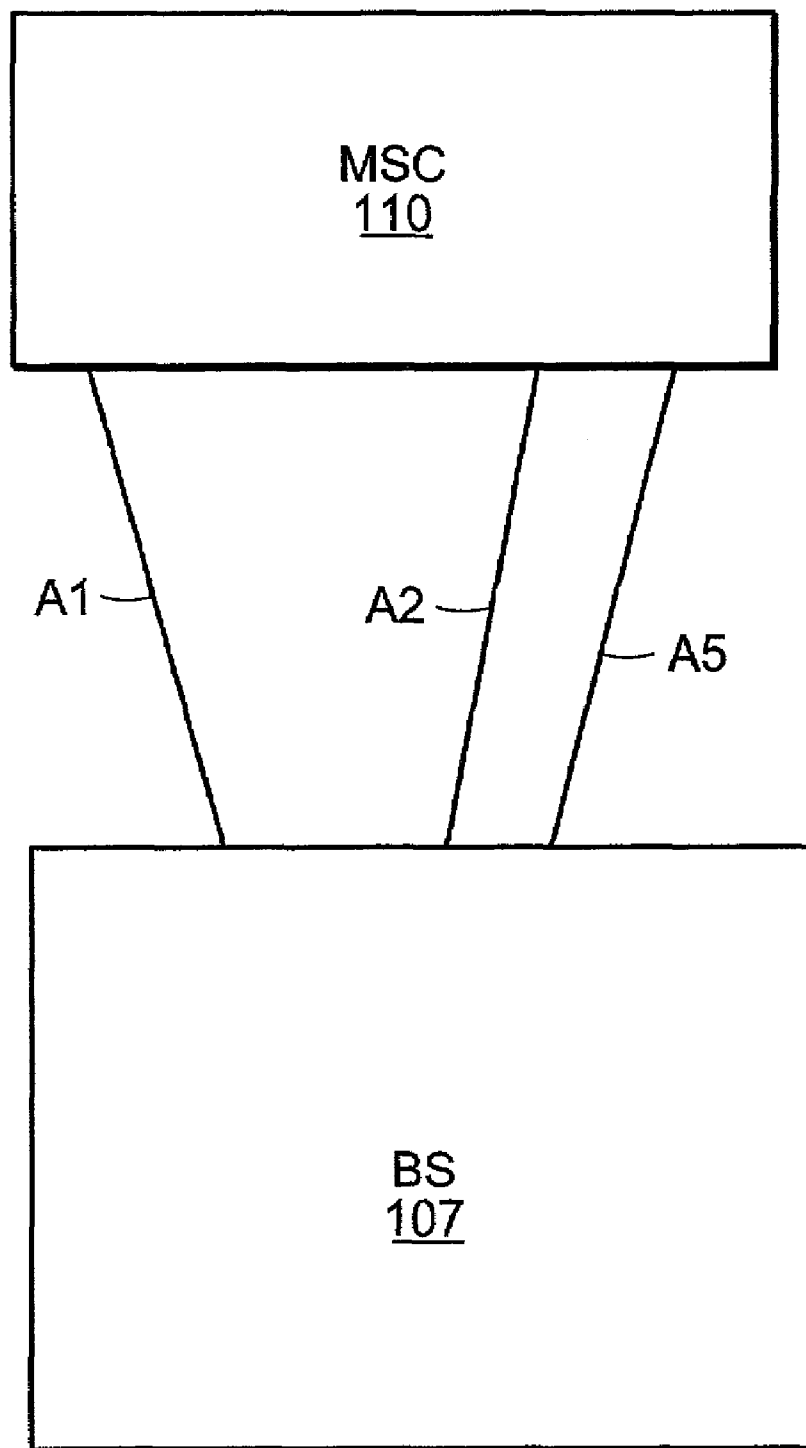


FIG. 2  
PRIOR ART

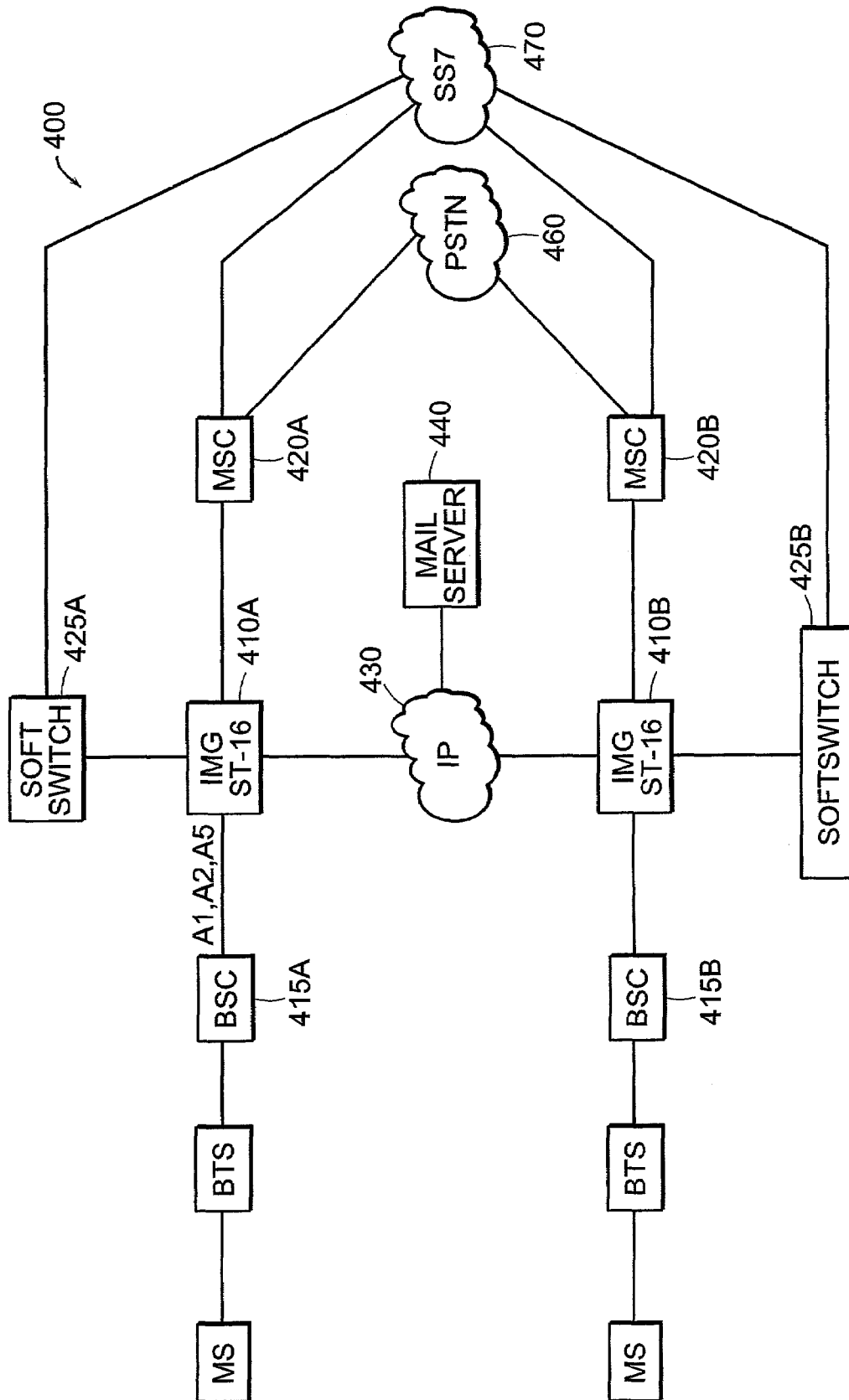


FIG. 3A

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