

**ECONOMICAL SYNCHRONIZATION SYSTEM FOR ASYNCHRONOUS
TRANSFER MODE MOBILE COMMUNICATION NETWORK WITHOUT
DEPENDENCE ON EXTERNAL SYSTEM**

ABSTRACT

An asynchronous transfer mode network includes a high-level station (23) and a mobile station (24) in a boundary zone between service cells of wireless base stations (21,22) connected to the high-level station through asynchronous transfer mode channels (25,26), wherein the high level station transmit a control message (MG1) through the asynchronous transfer mode channels (25,26) and the wireless base stations (21,22) to the mobile station (24) and receives response messages (MG2, MG3, MG4, MG5) from the mobile station (24) through the wireless base stations (21,22) and the asynchronous transfer mode channels (25,26), and determines a difference between transmission time lags along asynchronous transfer mode channels (25,26) so as to make built-in clocks (21a,22a) provided for the wireless base stations (21,22) synchronous with one another.

Fig 2