

MULTI-CARRIER TRANSMISSION SYSTEM, TRANSMISSION UNIT AND TRANSMISSION METHOD

ABSTRACT

In environments where periodically noise is generated, multi-carrier transmission performs effectively. At a central office (XTU-C) (1), a tone is transmitted along with a controlling level by a clock (38) synchronized with the noise. At a terminal (XTU-R) (2), the clock period is detected by a clock detector (33). A pseudo random signal including all carriers is transmitted from a pseudo random signal generating portion (20) in the central office (1). At the terminal (2), the SNR of the carriers is measured by an SNR measuring portion (34). The power/bit distribution of each carrier is then derived by a power/bit distribution calculating portion (35) and stored as demapping information upon down carrier transmission. Also, the power/bit distribution is transmitted to the central office (1) and stored in the mapping portion (12) of the central office (1). By this, down transmission is performed. Up transmission is also performed in the similar manner.

Fig 2