



OPTICAL TRANSMISSION DEVICE AND OPTICAL OUTPUT CONTROL SYSTEM THEREOF

ABSTRACT

There is disclosed an optical transmission device that comprises transmission device sections (10-1 to 10-n), an optical synthesis branching section (20) and a wavelength monitoring comparator. Each of the transmission device sections (10-1 to 10-n) includes optical/electric conversion circuits (101, 106), rate conversion circuits (102), an overhead insertion/separation circuit (103, 108), electric/optical conversion circuits (110, 1041), an optical amplifier circuit (105), a frame synchronous circuit (107), a service data signal circuit (111), and wavelength information output circuits (1042). The optical synthesis branching section (20), includes an optical synthesis circuit (201), for wavelength-multiplexing light signals of wavelengths λ_1 to λ_n from the transmission device sections (10-1 to 10-n), an optical booster amplifier (202) for amplifying and transmitting a wavelength-multiplexed signal to a light transmission path, an optical preamplifier (203) for amplifying the wavelength-multiplexed signal from the light transmission path, and an optical branching circuit (204) for separating the amplified wavelength-multiplexed signal to the light signals of the wavelengths λ_1 to λ_n .

Fig. 2A