photo detector **18**. From the address signal Ad the apparatus judges the position of the tracking track relative to the record zone now to be scanned (i.e. whether the tracking track is on the left side or on the right side of the record zone). In accordance with such a judgment, the controller **51** controls the switches SW_1 and SW_2. In the relative position between the record zone 4_1 and the tracking track 3_1 now being discussed, the controller **51** connects the switch SW_1 to the terminal C_2 and the switch SW_2 to the terminal C_8. Therefore, the sum of outputs from the sections A, B, C, D of the light-receiving surface of the photo detector **17** is applied to the terminal C_1 through summing amplifiers **53**, **56**, **52** as a clock signal CL, which functions as a reference signal to control the recording by the spot S_2 through a processing circuit, not shown. On the other hand, the difference between the output of the light-receiving area A+C and the output of the light-receiving area B+D of the photo detector **19** is applied to the terminal C_6 through summing amplifiers **63**, **66** and subtracting amplifier **68** as a tracking signal AT. This signal AT is transmitted to a tracking servo circuit (not shown) from the terminal C_6.

At the same time, a focusing signal AF is applied to the terminal C_9 through summing amplifiers **64**, **65** and subtracting amplifier **67**. The focusing signal AF is the difference between the output of the area A+B and the output of the area C+D of the photo detector **19**. This signal AF is supplied to a focus servo circuit (not shown) from the terminal C_9.

When information is recorded in the next record zone 4_2, the controller connects the switch SW_1 to the terminal C_3 and SW_2 to C_7 in response to the change of address signal Ad. Similarly to the above, a tracking signal AT appears at the terminal C_1, a clock signal CL at the terminal C_6 and a focusing signal AF at the terminal C_4.

The reproduction of the recorded information as shown in FIG. **9** can be performed with the same operation of the apparatus as that for recording. The shift of the positions of operating members is carried out in the same manner as described above for recording. The photo detector **18** reads out a reproduction signal RF. After separated from the address signal Ad by the separation circuit **50**, the reproduction signal RF is taken out from the terminal C_5.

In the above embodiment of the recording/reproducing apparatus according to the invention, the tracking signal can be detected from the tracking track lying on one side or the other side of the recording zone during recording or reproduction, whichever zone it may be. This assures always accurate auto-tracking without being affected by the clock signal. While the embodiment has been shown and described to be a recording-/reproducing apparatus, it is to be understood that the above embodiment is also applicable to a recording-only apparatus or to a reproducing-only apparatus.

A modification of the above-shown recording/reproducing apparatus will be hereinafter described with reference to FIGS. **11** to **13**.

In the modification, the light-receiving surface of the photo detector **18** is divided into four sections A, B, C and D as shown in FIG. **11**. Other parts of this modified apparatus correspond to those of the embodiment previously shown in FIGS. **4** and **5**. Since the light-receiving surface of the photo detector **18** is divided into four sections as shown in FIG. **11**, in this modification, it is possible to detect the tracking signal and focusing signal also from the reflected light of the spot S_2. This is an important feature of this modification.

The manner in which the modified apparatus records is entirely the same as that previously described with reference to FIG. **7**. But, the manner of reproduction is different from the above. In this modification, two information tracks are read at the same time during reproduction as shown in FIG. **12**.

Referring to FIG. **12**, the optical card has clock tracks 2_1, 2_2, . . . , tracking tracks 3_1, 3_2, . . . and information tracks 25_1, 25_2, . . . performed on the record side surface of the card. Each of the information track **25** is composed of a line of record pits recorded between a clock track **2** and a tracking track **3**. The first spot S_1 scans the information track 25_1, the second spot S_2 scans the tracking track 3_1 and the third spot S_3 scans the information track 25_2 in the direction of arrow a. The photo detectors **17** and **19** read out information from the information tracks 25_1 and 25_2 at the same time while the photo detector **18** detects signals for auto-tracking and auto-focusing. By repeating this reproducing operation from the first track to the last one of the optical card, all the information recorded in the card can be reproduced at twice the speed of the recording speed. In this operation of reproduction it is impossible to obtain a clock signal from the clock track. However, this causes no problem because, during the reproduction operation, is is possible to produce a clock signal from the signal recorded in the information track itself (so-called self-clock).

FIG. **13** is a block diagram showing a concrete form of the system for processing the signals generated from the three photo detectors **17**, **18**, **19** shown in FIG. **11**.

In FIG. **13**, the reference numeral **51** denotes again a control circuit for controlling the closing and opening of switches SW_1 and SW_2. **52**, **53**, **54**, **55**, **56**, **62**, **63**, **64**, **65**, **66**, **69**, **70**, **71** and **72** are all summing amplifiers. **57**, **58**, **67**, **68**, **73** and **74** are subtracting amplifiers. C_1 to C_{11} are terminals.

For recording information in the record zone 4_1 as shown in FIG. **7**, the controller **51** connects the switch SW_1 to the terminal C_2 and SW_2 to C_8 in accordance with the recording mode. Therefore, the sum of the outputs from the four light-receiving surface sections A, B, C and D of the photo detector **17** is applied to the terminal C_1 through the summing amplifiers **53**, **56**, **52** as a clock signal CL. The clock signal CL functions as a reference signal to control the recording by the spot S_2 through a processing circuit not shown. Applied to the terminal C_6 is a tracking signal AT which is the difference between the output of A+C and the output of B+D of the photo detector **19** through summing amplifiers **63**, **64** and subtracting amplifier **68**. This signal AT is supplied to a tracking servo circuit (not shown) from the terminal C_6.

At the same time, a focusing signal AF is applied to the terminal C_9 through summing amplifiers **64**, **65** and subtracting amplifier **67**. The focusing signal is the difference between the output of A+B and the output of C+D of the photo detector **19**. This signal AF is transmitted to a focus servo circuit (not shown) from the terminal C_9.

When information is recorded in the next record zone 4_2, the controller **51** connects the switch SW_1 to the terminal C_3 and SW_2 to C_7. Similarly to the above, a tracking signal AT appears at the terminal C_1, a clock signal CL at C_6 and a focusing signal AF at C_4.