ABSTRACT:

Compatible optical read device.

An optical read apparatus is adapted to read record carriers of a first type and record carriers of a second type. The record carrier of the first type comprises an information structure (Figure 2a) arranged in tracks and adapted to be scanned with radiation of a first wavelength. The record carrier of the second type comprises an information structure in the form of a phase structure (Figure 3a) arranged in tracks and comprising effects (16) which alternate with intermediate areas. The information structure (Fig. 3a) of the record carrier of the second type is adapted to be scanned with radiation of a second wavelength longer than the first wavelength. The device comprises scanning means (4, 6, 10) for scanning the information structure in the track of a record carrier of the first or the second type present in the device by means of a focused beam (9) of radiation of the first wavelength. A detection system (11) converts radiation from the scanned portion of the track into an analog read signal (12). A signal converter (40) converts the read signal (12) into a corresponding binary information signal (49). The signal converter (40) comprises a first comparator (55) for supplying a first detection signal (47) if the difference (A-B) between two signal values (A; B) of the read signal (12) which are situated at a given time interval (T) from one another exceeds a given positive threshold value (44). A second comparator (56) supplies a second detection signal (48) in the case that the difference (A-B) between two signal values (A; B) of the read signal (12) which are situated at the given time interval (T) from one another is below a given negative threshold value (45). A signal recovery circuit (46) derives the binary information signal (50) from the first (47) and the second detection signal (48). (Figure 4)

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