The invention relates to a holding device for a disc in a magneto-optical recording- and/or reproduction appliance, in which the disc is held on one side by a first wheel, in which from the other side a first arm with a second wheel is pivotable about an axis against the first wheel in order to centre the record, and in which an electromagnet is provided for reversing the magnetism of the disc.

In a magneto-optical recording- and/or reproduction appliance a disc, the recording medium, is pressed by a wheel which is attached to pivotable arm, against another wheel fixedly connected to a housing, in order to centre the disc on the disc drive. One of the two wheels, usually that wheel arranged opposite to the arm on the housing, is driven by a motor. One side of the disc, for example, the lower side, is scanned by an optical scanning device. On the opposite, upper side of the disc, an electromagnet is positioned as close as possible above the surface of the disc which reverses the magnetisation of the magnetic domains of the disc.

A holding device for a disc in a magneto-optical recording and/or reproduction appliance is known from US-A 4 740 937. The disc is held on the one side by a first wheel. From the other side, a first arm with a second wheel is mounted to be rotatable about an axis against the first wheel in order to centre the disc. An electromagnet, mounted on a second arm, is provided for reversing the magnetisation of the disc, and the arm is pivotable about an axis against the disc.

When moving the disc in and out, the electromagnet must be raised sufficiently in order that it does not touch the record and damage the sensitive surface thereof by scratching it.

It is therefore the object of the invention to provide a device for a magneto-optical recording and/or reproduction device which during loading or unloading of an appliance with a disc, prevents the electromagnet from damaging the surface thereof with scratches.

The invention solves this task in that a lever is attached to the first arm rotatable on an axis, that the second arm with the electromagnet lies on a first arm of the lever, that a stop is provided for the other arm of the lever, that upon swinging of the first arm away from the disc the first arm of the lever pushes the second arm with the electromagnet away from the disc, that the other arm of the lever strikes the stop so that the lever is rotated about its axis, whereby the first arm of the lever pushes the second arm even further away from the disc.

Figure 1 shows a disc in the play position in a magneto-

optical recording and/or reproduction appliance

Figure 2 shows a first embodiment of the invention in top plan view

Figure 3 shows a side-view of the first embodiment in a first position

Figure 4 is a side-view of the first embodiment in a second position.

In Figure 1 there is shown how a disc CD is pressed against a wheel R1 via a wheel R2, which is positioned on an arm AR1, which is pivotable about an axis A1, and is centred in this way. The wheel R1 is driven by a motor MO. The lower side of the disc CD is scanned by an optical scanning device AV. Close above the upper side of the disc CD is an electromagnet M, in order to be able to reverse the direction of magnetisation of the magnetic domains in the disc CD. During operation the electromagnet M and the optical scanning device AV are moved radially relative to the disc CD, as indicated by the double arrow.

Figure 2 shows the arm AR1 with the wheel R2, which is rotatable about the axis A1. The magnet M, which is drawn using a broken line, is attached to an arm AR2, which is pivotable about an axis A2. On the arm AR1 a lever H is mounted rotatably about an axis A3. On the first arm AR3 of the lever H3 rests the arm AR2, which carries the electromagnetic M. For the other arm AR4 of the lever H there is provided a stop AS.

Figure 3 shows a side-view of the embodiment, in which the arm AR1 lies in the low position. The disc CD is in the play position. During the play operation and the search operation the arm AR2 slides on the first arm AR3 of the lever H, which in the play position extends parallel to the surface of the disc. The arm AR2 can for instance be pressed by a spring on the first arm AR4 of the lever H.

In Figure 4 the position of the arm AR1 is shown, in which a disc is either moved into or out of the play position. The two arms AR3 and AR4 of the lever H can be constructed to be relatively rotatable. A spring, not shown, holds both parallel when in the play position, while they are shown in Figure 4 relatively rotated by an angle. This measure has the advantage that the arm AR1 can be raised further without having the arm AR2 with the magnet following this motion.

For loading and for unloading of the magneto-optical recording- and/or reproduction appliance with a disc CD the arm AR1 is pivoted upwardly in the direction of the arrow. Therefore, the first arm AR3 of the lever H pushes the arm

Therefore, the first arm AR3 of the lever H pushes the arm AR2 with the electromagnet M also upwardly. Because the other arm AR4 of the lever H, however, strikes the stop AS, the lever H rotates about its axis A3, so that the first arm AR3 of the lever H pushes the arm AR2 even further upwardly, i.e. further away from the disc CD. In this way during loading and unloading of the appliance with a disc a sufficiently large spacing is achieved between the electromagnet and the disc. The disc CD is therefore protected from being scratched by the electromagnet M.

The invention is suitable for magneto-optical recording and/or reproduction appliances. It does not matter, whether the disc e.g. is oriented in the appliance horizontally or vertically.

* C L M S *

CLAIMS

1. A holding device for a disc (CD) in a magneto-optical recording and/or reproduction appliance, in which the disc (CD) is held on one side by a first wheel (R1), in which, from the other side, a first arm with a second wheel (R2) is pivotable about an axis (A1) against the first wheel (R1) in order to centre the disc (CD), and in which an electromagnet (M), mounted on a second arm (AR2), is provided for reversing the magnetisation of the disc, and the arm is pivotable about an axis (A2) against the disc (CD), characterised in that a lever (H) is attached to the first arm (AR1) rotatable on an axis (A3), that the second arm (AR2) with the electromagnet (M) lies on a first arm (AR3) of the lever (H), that a stop (AS) is provided for the other arm (AR4) of the lever (H), that upon swinging of the first arm (AR1) away from the disc (CD) the first arm (AR3) of the lever (H) pushes the second arm (AR2) with the electromagnet (M) away from the disc (CD), that the other arm (AR4) of the lever (H) strikes the stop (AS) so that the lever (H) is rotated about its axis (A3), whereby the first arm (AR3) of the lever (H) pushes the second arm (AR2) even further away from the disc (CD).

2. A holding device according to claim 1, characterised in that the second arm (AR2) is pressed by a spring against the first arm (AR3) of the lever (H).

3. A holding device according to claim 1 or 2, characterised in that during play operation the lever (H) extends parallel to the surface of the disc.

4. A holding device according to claim 1, 2 or 3, characterised in that the two arms (AR3, AR4) of the lever (H) are rotatable relative to each other and that a spring holds the two arms (AR3, AR4) parallel to each other.