to be shielded by a canopy-shaped interceptor (not shown) disposed on the front side of a housing.

[0031] Further, the reference numeral **70** is a light shielding member. This light shielding member **70** is disposed on a line connecting both the light send/receive units **1***a* and **1***b* so that direct light does not enter between the light send/receive units **1***a* and **1***b*, more specifically light projected from the light send/receive unit **1***a* does not enter the light send/receive unit **1***b*, and light projected from the light send/receive unit **1***b* does not enter the light send/receive unit **1***a*. Moreover, the light shielding member **70** is an object whose light reflectance is "0" practically, and its height is substantially the same as the height of the recurrence reflection sheet **7**.

[0032] **FIG. 2** is a schematic diagram showing the internal structure of the light send/receive units **1***a* and **1***b* and the optical paths. Both the light send/receive units **1***a* and **1***b* respectively include light emitting elements **11***a* and **11***b* composed of laser diodes for emitting infrared laser beams, collimating lenses **12***a* and **12***b* for collimating the laser beams from the light emitting elements **11***a* and **11***b*, light receiving elements **13***a* and **13***b* for receiving reflected light from the recurrence reflection sheet **7**, visible light cut filters **14***a* and **14***b* for shielding visible light components of external light from the display screen, illumination light, etc. which enters the light receiving elements **13***a* and **13***b*, beam splitters **15***a* and **15***b* for guiding the reflected light to the light receiving elements **13***a* and **13***b*, and polygon mirrors **16***a* and **16***b* having the shape of a square column, for example, for angularly scanning the laser beams from the light emitting elements **11***a* and **11***b*.

[0033] With the rotation of the polygon mirrors **16***a* and **16***b*, optical angular scanning at an angle of not less than 90° is realized. The light receiving elements **13***a* and **13***b* judge the timing of a synchronous signal by receiving scanned laser beams from the polygon mirrors **16***a* and **16***b* at the time each scanning is started, and this timing is used to generate information for correcting of the rotation rate of the polygon mirrors **16***a* and **16***b*.

[0034] The laser beams emitted from the light emitting elements **11***a* and **11***b* are collimated by the collimating lenses **12***a* and **12***b*, let through the later-described beam splitters **15***a* and **15***b*, and then angularly scanned in a plane which is substantially parallel with the display screen **10** and projected onto the recurrence reflection sheet **7** by the rotation of the polygon mirrors **16***a* and **16***b*. After the reflected light beams from the recurrence reflection sheet **7** are reflected by the polygon mirrors **16***a* and **16***b* and beam splitters **15***a* and **15***b*, the reflected light beams pass through the visible light cut filters **14***a* and **14***b* and enter the light receiving elements **13***a* and **13***b*, respectively. However, if an indicator S is present in the optical path of the projected light beams, the projected light beams are cut off, and therefore the reflected light beams do not enter the light receiving elements **13***a* and **13***b*.

[0035] The light send/receive units **1***a* and **1***b* are connected with light emitting element drivers **2***a* and **2***b* for driving the light emitting elements **11***a* and **11***b*, light receiving signal detectors **3***a* and **3***b* for converting the amount of light received by the light receiving elements **13***a* and **13***b* into an electric signal, and a polygon controller **4** for controlling the operation of the polygon mirrors **16***a* and **16***b*, respectively. Moreover, the reference numeral **5** represents an MPU for calculating the position and size of the indicator S and for controlling the operation of the entire apparatus, and **6** represents a display device for displaying the results of the calculation performed by the MPU **5**.

[0036] In such an optical scanning-type touch panel of the present invention, as shown in **FIG. 1**, if the explanation is given with respect to the light send/receive unit **1***b*, for example, the projected light from the light send/receive unit **1***b* is scanned in a counterclockwise direction in **FIG. 1** from a position where the projected light is incident on the light receiving element **13***b*, via a position where the projected light is shielded by the light shielding member **70**, up to a position (Ps) where the projected light is reflected by an end of the recurrence reflection sheet **7**, that is, a scanning start position. Thereafter, the projected light is reflected by the recurrence reflection sheet **7** until it comes to a position (P1) where the projected light reaches one end of the indicator S, but the projected light is shielded by the indicator S up to a position (P2) where it reaches the other end of the indicator S, and then the projected light is reflected by the recurrence reflection sheet **7** until it comes to a scanning end position (Pe).

[0037] However, in the light send/receive unit **1***a*, the light is scanned in a clockwise direction in **FIG. 1**. The light send/receive unit **1***a* scans the light in a clockwise direction in **FIG. 1** with the lower side of the display screen **10** as the scanning start direction, while the light send/receive unit **1***b* performs scanning in a counterclockwise direction in **FIG. 1** with the upper side of the display screen **10** as the scanning start direction. The reason for this will be explained below.

[0038] In the case of the light send/receive unit **1***b*, either the upper side or the left side of the display screen **10** can be set as the scanning start direction. However, the upper side of the display screen **10** is set as the scanning start direction because, when seen from the light send/receive unit **1***b*, the upper side of the display screen **10** is closer than the lower side and the amount of the reflected light is larger, and because the light is incident on the reflecting surface of the recurrence reflection sheet **7** at substantially right angles on the upper side of the display screen **10** and the amount of the reflected light is larger. In other words, for the light send/receive unit **1***b*, if the lower side of the display screen **10** is set as the scanning start direction, since the lower side of the display screen **10** is farther than the upper side, the amount of the reflected light at the start of scanning becomes smaller, and also since the reflecting surface of the recurrence reflection sheet **7** is curved, the amount of the reflected light becomes smaller. However, the curve of the recurrence reflection sheet **7** is not an essential problem, and, of course, it is possible to adopt a structure where the recurrence reflection sheet **7** is not curved.

[0039] By the way, as shown in **FIG. 1**, the recurrence reflection sheet **7** is arranged in a U-shaped form to surround the display screen **10** with a side, on which both of the light send/receive units la and **1***b* are disposed, open. Further, as represented by the reference codes **7***a* and **7***b*, the recurrence reflection sheet **7** is arranged in a sawtooth form at portions where an angle at which the light is projected from both the light send/receive units **1***a* and **1***b* to the recurrence reflection sheet **7** becomes smaller, more specifically, portions of two sides (the upper and lower sides in **FIG. 1**) orthogonal