receives, for example via vehicle bus system **126**, information from sensor units that may take the form of a camera system **130** or an ultrasonic sensor system **132**, for example. Via vehicle bus system **126**, receiver unit **124** further receives information about a driving state of motor vehicle **101**. An evaluation module **128** ascertains the control intention of user **106** or **108** on the basis of the received sensor information, which includes information about the driving condition. Representation module **122** modifies the information that is represented on display device **102** as a function of the ascertained control intention. Evaluation module **128** is preferably designed in such a way that a control spotlight and for the individual control elements a control probability are ascertained.

[0083] The control unit further includes an activation module **134**, which triggers or activates a control action if a body part, for example a finger, is located in an activation region that is predefined relative to the representation of the control element on display device **102**. In this connection, signals may be transmitted via the vehicle bus that influence other control devices of motor vehicle **101**.

[0084] Control unit **120** and individually included modules **122**, **128**, **134** may take the form of hardware as well as software.

[0085] The display device may take the form of a projection display in which the represented information is projected onto a surface. In such a case, the distance or the movement of the body part relative to this surface or a look onto this surface, etc. are relevant.

[0086] In the sensor units that transmit high-frequency signals via the human body, frequencies in the range of approximately 80 kHz to 150 kHz may be particularly suitable. The sensor units, however, may also be operated at frequencies outside of this indicated frequency range.

[0087] In addition or alternatively to a sensor unit that detects a body part on the basis of the transmission of high-frequency signals via the human body, other contactless sensor units may be used such as sensor units based on ultrasound or even sensor units that use optical methods. Such a sensor unit may be designed, for example, according to the following principle. A transmitting LED radiates a rectangularly amplitude-modulated light signal in the optical or infrared wavelength range. The light signal reflected on an object is detected by a photodiode. A compensation LED sends a 180° phase-shifted, likewise rectangularly amplitude-modulated reference light signal to the photodiode via a constant light path. The compensation LED is controlled via a control loop using a control signal such that the received reflected light signal of the send LED and the received reference light signal of the compensation LED cancel out at the photodiode, and an equisignal is detected. A change in the control signal is a measure of the distance of the object. A sensor unit designed according to this principle is largely independent of temperature fluctuations and brightness fluctuations.

[0088] At least one sensor unit or several sensor units may be designed so as to be able to detect a planar extension of the body part (possibly by interacting). This makes it possible to detect gestures that are performed by the body part, for example a hand, and to interpret them as a control intention. Gestures that depend only on the body part attitude, in particular a hand attitude, are called rigid or static gestures. A hand **140** held flat in front of the display device, as shown in FIG. **9**, may be interpreted as a stop signal for example, which stops a scrolling process or prevents any adaptation of the represented information for a predefined time span. FIGS. **10** and **11** show in exemplary fashion other simple static gestures, which are respectively performed by left hand **140**. If it is possible to resolve multiple parts of the hand separately, then even sophisticated rigid gestures may be detected and used, as shown in exemplary fashion in FIGS. **12** through **17**.

[0089] If the movement of the body part in a certain spatial region is compared to predefined path lines, then dynamic gestures may be detected. Examples of path lines are shown by way of example in a two-dimensional plane in FIG. **18** and in a three-dimensional space in FIG. **19**. Examples of dynamic gestures are shown in FIGS. **20** through **27**. The gestures shown in FIG. **20** includes a movement of horizontally flat extended hand **140** upwards, while the gesture shown in FIG. **21** accordingly includes a movement of hand **140** downwards. In FIGS. **22** through **25**, the gestures are performed by a movement of the vertically flat extended hand away from the display device (FIG. **22**) or toward the display device (FIG. **23**) and a movement toward the left (FIG. **24**) or a movement toward the right (FIG. **25**). A speed of approach and/or removal of the body part may accordingly also be interpreted and used. FIGS. **26** and **27** show gestures that are performed by turning extended hand **140** about its longitudinal axis counterclockwise or clockwise. The gestures may respectively also include both opposite directions of movement. In addition to the traversed spatial points that define a movement, an analysis of the path lines may also take into account a speed with which the movement is performed.

[0090] If it is possible to resolve multiple parts of the hand separately and/or to detect their relative speeds, then complex gestures or hand attitudes and sequences of movements, for example an extension and closing of the fingers of a flat hand or a clenching of the fingers to form a first (FIG. **28**) and an opening of the first (FIG. **29**) may be evaluated and taken into account accordingly. Additional complex gestures are shown by way of example in FIGS. **30** and **31**, in which a performance of the respective gesture involves folding fingers **142** (FIG. **30**) and extending fingers **142** (FIG. **31**). FIG. **32** shows a complex gesture, in which a gravitational center of hand **140** performs a movement to the right in addition to folding fingers **142**. In FIG. **33**, the complex exemplary gesture shows a clenching of the originally vertically oriented, flat extended hand **140** and a simultaneous rotation of the hand by 90° to the right.

[0091] The gestures shown are only exemplary gestures. Various control intentions may be assigned to the individual gestures, which effect a corresponding adaptation of the represented information.

[0092] It may be provided for the interactive control device to be capable of being operated in a learning mode and thus be able to learn specific gestures in the individual specificity by different persons. For example, a driver may be prompted to perform specific gestures. An individual specificity of the gesture may be learned on the basis of the measurement data detected during the performance. Learning advantageously occurs in relation to individual persons. Persons may be identified by the specificity of the gestures themselves or by a user or driver identification encoded in a vehicle key for example.

[0093] Some exemplary embodiments may be provided such that gestures of a driver are distinguished from those of a front passenger. If the interactive control device is situated in a center console of the vehicle, then the driver's gestures may be distinguished from those of a front passenger by whether the gestures are performed using a right or a left