Patent claims

1. A gaming and/or entertainment device, in particular a coin-operated and/or token-operated gaming device or gambling device, having a plurality of separate display units (12, 13, 14), in particular screens, for displaying information, in particular contents of games and/or game information, wherein at least one of the display units (12, 13, 14) is provided with a touch panel (25) for inputting control instructions by touch, characterized in that the touch panel (25) is of continuous design over, in each case, at least part of at least two different display units (12, 13, 14), at least one display unit (12, 13, 14) of which has a concavely curved display surface (12a, 13a, 14a).

2. The gaming and/or entertainment device as claimed in the preceding claim, wherein the touch panel (25) extends continuously over a plurality of respectively concavely curved display units (12, 13, 14), wherein the respectively concavely curved display surfaces (12a, 13a, 14a) are advantageously matched to one another in respect of contouring, curvature and positioning, in such a way that the display surfaces (12a, 13a, 14a) form partial surfaces of a uniformly curved total display surface (15) which is contoured harmonically overall.

3. The gaming and/or entertainment device according to the preceding claim, wherein the display surfaces (12a, 13a, 14a) of the plurality of display units (12, 13, 14) each have, at least in certain sections, single-axis concave curvature about a horizontal curvature axis and adjoin one another harmonically, in particular are contoured with curvature about a common curvature axis and have the same curvature radius which remains constant over the respective display surface.

4. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) extends continuously over three display units (12, 13, 14) preferably arranged one on top of the other and/or essentially over the entire game display region (16) of the gaming and/or entertainment device.

5. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel (25) has at least one section which has contouring with at least single-axis curvature, wherein the touch panel (25) is preferably embodied with continuous concave curvature, in particular with single-axis curvature about a horizontal curvature axis.

6. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel (25) and the at least one concavely curved display unit (12, 13, 14) have a common curvature center point and/or a common curvature axis.

7. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel (25) extends with continuous concave curvature essentially over the entire display surface (15) of the device and at the same time fits snugly against the display units (13, 14, 15) which jointly form this display surface, in such a way that the touch panel (25) and the display units (12, 13, 14) each have curvature whose curvature center points and/or curvature axes essentially coincide.

8. The gaming and/or entertainment device according to the preamble of claim 1 or to one of the preceding claims, wherein the touch panel (25) has a curvature radius in the range from 0.5 m to 3 m, in particular 0.75 m to 1.5 m.

9. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein at least one of the display units (12) covered by the touch panel (25) has a display surface which has different contours from the touch

panel (25) lying above it and/or the touch panel (25) extends over a plurality of display units (12, 13, 14, 15) which are of different designs in relation to one another and/or are arranged at different angles of inclination and/or are curved in a different fashion.

10. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) is of transparent design, and the display units have display surfaces (12a, 13a, 14a, 15a), in particular screen surfaces, which are embodied separately from the touch panel (25) and over which the touch panel (25), which is of transparent design, extends, wherein the touch panel (25) is preferably spaced apart at least in certain sections from the display surface (12a, 13a, 14a), a display unit (12, 13, 14) located below it.

11. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) is of flexible design such that the touch panel (25) can be placed in various states of curvature.

12. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) extends continuously over at least two screens (13, 14), at least one screen (14) of which is arranged concealed partially behind at least one other screen (13) considered from the device operator control station.

13. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) forms a transparent viewing panel which is mounted in front of the display units (12, 13, 14, 15) and which is fitted into a device housing (11) and forms a front region of the device housing facing the device operator control console.

14. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) extends over at least 30% of the sur-

face of a housing front of the gaming and/or entertainment device facing a device operator control console.

15. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) is assigned a parallax-compensating device which comprises sensing means for sensing the head position and/or eye position of a device operator and moves a respectively sensed contact point position on the touch panel as a function of the sensed head position and/or assigns it to a display element, offset with respect to the sensed contact point position, of the display unit.

16. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel (25) is assigned control means (26) for controlling the position of display elements on at least two different display units (13, 14), wherein the specified control means (26) have movement means (27) for moving a display element (28) from one display unit (13) to another display unit (14) over the boundaries of the display units (13, 14) lying between them.

17. The gaming and/or entertainment device as claimed in the preceding claim, wherein the movement means (27) has blanking control means for blanking out various sections of the display element in accordance with a gap dimension between the display units (13, 14) when the display element (28) is moved over the boundaries of the display units (13, 14).

18. An interactive terminal, in particular gaming device and/or entertainment device or gambling device, having at least one display unit (12, 13, 14, 15) for displaying information, wherein the at least one display unit (12, 13, 14, 15) is provided with a touch panel (25) for inputting control instructions by touch, characterized in that the touch panel (25) has at least one section which has a contour which is curved at least on one axis with a radius of curvature in the range from 0.5m to 3m, wherein the curved section of the touch panel

(25) extends over a level-contour display surface of the display unit (12, 13, 14, 15).

Patent claims

1. A gaming and/or entertainment device having a plurality of separate display units for displaying information, wherein the display units form independent assemblies and at least one of the display units is provided with a touch panel for inputting control instructions by touch, characterized in that the touch panel is of continuous design over, in each case, at least part of at least two different display units and extending over the boundary region or the intermediate space between the at least two different display units, and wherein the touch panel forms a transparent viewing panel which is mounted in front of the at least two different display units and which is fitted into a device housing and forms the machine operating position facing the front region of the device housing, and
   wherein at least one display unit of the plurality of separate display units has a concavely curved display surface viewed from the device operating position.

2. The gaming and/or entertainment device as claimed in the preceding claim, wherein the touch panel extends continuously over a plurality of respectively concavely curved display units, wherein the respectively concavely curved display surfaces are advantageously matched to one another in respect of contouring, curvature and positioning, in such a way that the display surfaces form partial surfaces of a uniformly curved total display surface which is contoured harmonically overall.

3. The gaming and/or entertainment device according to the preceding claim, wherein the display surfaces of the plurality of display units each have, at least in certain sections, single-axis concave curvature about a horizontal curvature axis and adjoin one another harmonically, in particular are contoured with curvature about a common curvature axis and have the same curvature radius which remains constant over the respective display surface.

4. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel extends continuously over three display units preferably arranged one on top of the other and/or essentially over the entire game display region of the gaming and/or entertainment device.

5. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel has at least one section which has contouring with at least single-axis curvature, wherein the touch panel is preferably embodied with continuous concave curvature, in particular with single-axis curvature about a horizontal curvature axis.

6. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel and the at least one concavely curved display unit have a common curvature center point and/or a common curvature axis.

7. The gaming and/or entertainment device according to one of the preceding claims, wherein the touch panel extends with continuous concave curvature essentially over the entire display surface of the device and at the same time fits snugly against the display units which jointly form this display surface, in such a way that the touch panel and the display units each have curvature whose curvature center points and/or curvature axes essentially coincide.

8. The gaming and/or entertainment device according to the preamble of claim 1 or to one of the preceding claims, wherein the touch panel has a curvature radius in the range from 0.5 m to 3 m, in particular 0.75 m to 1.5 m.

9. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein at least one of the display units covered by the touch panel has a display surface which has different contours from the touch panel lying above it and/or the touch panel extends over a plurality of display units which are of different designs in relation to one another and/or are arranged at different angles of inclination and/or are curved in a different fashion.

10. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel is of transparent design, and the display units have display surfaces, in particular screen surfaces, which are embodied separately from the touch panel and over which the touch panel, which is of transparent design, extends, wherein the touch panel is preferably spaced apart at least in certain sections from the display surface, a display unit located below it.

11. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel is of flexible design such that the touch panel can be placed in various states of curvature.

12. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel extends continuously over at least two screens, at least one screen of which is arranged concealed partially behind at least one other screen considered from the device operating position.

13. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel forms a transparent viewing panel which is mounted in front of the display units and which is fitted into a device housing and forms a front region of the device housing facing the device operating position.

14. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel extends over at least 30% of the surface of a housing front of the gaming and/or entertainment device facing a device operating position.

15. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel is assigned a parallax-compensating device which comprises sensing means for sensing the head position and/or eye position of a device operator and moves a respectively sensed contact point

position on the touch panel as a function of the sensed head position and/or assigns it to a display element, offset with respect to the sensed contact point position, of the display unit.

16. The gaming and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel is assigned control means for controlling the position of display elements on at least two different display units, wherein the specified control means have movement means for moving a display element from one display unit to another display unit over the boundaries of the display units lying between them.

17. The gaming and/or entertainment device as claimed in the preceding claim, wherein the movement means has blanking control means for blanking out various sections of the display element in accordance with a gap dimension between the display units when the display element is moved over the boundaries of the display units.

18. The gaming device and/or entertainment device as claimed in one of the preceding claims, wherein the touch panel has at least one section which has a contour which is curved at least on one axis with a radius of curvature in the range from 0.5m to 3m, wherein the curved section of the touch panel extends over a level-contour display surface of the display unit.