CLAIMS

1. A set of panels (1,2) comprising a first (1) and a second panel (2), a panel edge (12) of the second panel (2) being insertable into a core groove (6) of the first panel (1) to obtain a mechanical connection between the first and the second panel, the panel edge (12) being insertable into the core groove (6) by an essentially linear relative displacement of the first and second panel when the first and second panel are arranged essentially perpendicularly to each other,

said panel edge (12) comprising a separate and flexible tongue (3) and said core groove (6) comprising a tongue groove (5), or said panel edge (12) comprising a tongue groove (5) and said core groove (6) comprising a separate and flexible tongue (3),

wherein the separate and flexible tongue (3) is insertable into the tongue groove (5) for connecting said panels to each other in a first direction, which is perpendicular to a main plane (MP-1) of the first panel,

wherein the panel edge (12) of the second panel (2) is configured to cooperate with the core groove (6) of the first panel (1) for connecting said panels to each other in a second direction, which is perpendicular to a main plane (MP-2) of the second panel,

wherein a longitudinal direction of the separate and flexible tongue (3) extends parallel with said panel edge and/or core groove, and

wherein the separate and flexible tongue (3) is arranged in an insertion groove (4), said separate and flexible tongue (3) being displaceable inwardly towards a bottom of the insertion groove (4) and outwardly into the tongue groove (5) during a locking of the first and second panel,

characterized in that the separate and flexible tongue (3) comprises a guiding protrusion (10) at a short edge of the separate and flexible tongue (3), and that the guiding protrusion (10) is configured such that its shape changes during the locking and/or unlocking of the first and second panel, and in that the guiding protrusion (10) is curve shaped and configured to guide a rod shaped tool (9) into the tongue groove (5) when the rod shaped tool (9) is inserted into the insertion groove (4).

2. The set of panels as claimed in claim 1, wherein the guiding protrusion (10) is further configured to be in contact with an inner part of the insertion groove (4) during the locking.

3. The set of panels as claimed in claim 1, wherein there is a space between an inner part of the insertion groove (4) and the guiding protrusion (10) in a locked position of the first (1) and the second (2) panel.

4. The set of panels as claimed in anyone of the preceding claims, wherein the rod shaped tool (9) comprises an essentially round cross section.

5. The set of panels as claimed in anyone of the preceding claims, wherein the separate and flexible tongue (3) comprises several flexible protrusions (8, 10) extending in the length direction of the tongue (3).

6. The set of panels as claimed in any of the preceding claims, wherein, when said panel edge (12) comprises the tongue groove (5) and said core groove (6) comprises the separate and flexible tongue (3), said tongue groove (5) is arranged in a lower side (2a) or in an upper side (2b) of the second panel (2).

7. The set of panels as claimed in any of the preceding claims, wherein, when said panel edge (12) comprises the tongue groove (5) and said core groove (6) comprises the separate and flexible tongue (3), said insertion groove (4) is formed in said core groove (6) of the first panel (1).

8. The set of panels according to claim 7, wherein said insertion groove (4) is arranged in a side wall (6a) of said core groove (6).

9. A locking system for locking of panels (1, 2) comprising a first (1) and a second panel (2), wherein a panel edge (12) of the second panel (2) is insertable into a core groove (6) of the first panel (1) to obtain a mechanical connection between the first and the second panel, the panel edge (12) being insertable into

the core groove (6) by an essentially linear relative displacement of the first and second panel when the first and second panel are arranged essentially perpendicularly to each other, wherein the locking system comprises:

a separate and flexible tongue (3) arranged in an insertion groove (4) which is formed in the core groove (6); and

a tongue groove (5) at the panel edge (12), said tongue groove (5) being adapted to accommodate a part of the separate and flexible tongue (3),

characterized in that the separate and flexible tongue (3) comprises a guiding protrusion (10) at a short edge of the separate and flexible tongue (3), and that the guiding protrusion is configured such that its shape changes when a rod shaped tool (9) is inserted into at least a part of the tongue groove (5), and in that the guiding protrusion (10) is curve shaped and configured to guide a rod shaped tool (9) into the tongue groove (5) when the rod shaped tool (9) is inserted into the insertion groove (4).

10. A locking system as claimed in claim 11, wherein the rod shaped tool (9) comprises an essentially round cross section.

11. A set of panels (1,2) comprising a first (1) and a second panel (2), a panel edge (12) of the second panel (2) being insertable into a core groove (6) of the first panel (1) to obtain a mechanical connection between the first and the second panel, the panel edge (12) being insertable into the core groove (6) by an essentially linear relative displacement of the first and second panel when the first and second panel are arranged essentially perpendicularly to each other,

said panel edge (12) comprising a separate and flexible tongue (3) and said core groove (6) comprising a tongue groove (5),

wherein the separate and flexible tongue (3) is insertable into the tongue groove (5) for connecting said panels to each other in a first direction, which is perpendicular to a main plane (MP-1) of the first panel,

wherein the panel edge (12) of the second panel (2) is configured to cooperate with the core groove (6) of the first panel (1) for connecting said panels to each other in a second direction, which is perpendicular to a main plane (MP-2) of the second panel,

wherein a longitudinal direction of the separate and flexible tongue (3) extends parallel with said panel edge and/or core groove, and

wherein the separate and flexible tongue (3) is arranged in an insertion groove (4), said separate and flexible tongue (3) being displaceable inwardly towards a bottom of the insertion groove (4) and outwardly into the tongue groove (5) during a locking of the first and second panel,

characterized in that an engagement portion (20) of the core groove (6) is arranged to engage with said separate and flexible tongue (3) during locking of the first and second panel for displacing the separate and flexible tongue (3) inwardly towards the bottom of the insertion groove (4), wherein said engagement portion (20) is bevelled.

12. The set of panels as claimed in claim 11, wherein the bevelled engagement portion (20) is provided in an upper part (30) of the first panel (1), said upper part (30) having a higher density than a center part (32) of the first panel (1).

13. The set of panels as claimed in claim 11 or 12, wherein the bevelled engagement portion (20) is provided between a side wall (6a) of said core groove (6) and a lower (1a) or upper side (1b) of the first panel (1).

14. The set of panels as claimed in any of claims 11 to 13, wherein the second panel (2) comprises an overlapping portion (24), which engages with the bevelled engagement portion (20) in a locked position of the first (1) and second (2) panel.

15. The set of panels as claimed in any of claims 11 to 14, wherein a thickness of the second panel (2) is smaller at the panel edge (12) than in a visible part of the second panel (2) which is visible in a locked position of the first (1) and the second (2) panel.

16. The set of panels as claimed in any of claims 11 to 15, wherein a distance between a lower edge side (22a) and a parallel upper edge side (22b)

of the panel edge (12) is smaller than a distance between a lower side (2a) and a parallel upper side (2b), the lower and upper edge sides (22a, 22b) being located closer to a side edge (2c) of the second panel (2) than the lower and upper sides (2a, 2b).

17. The set of panels as claimed in claim 16, wherein the insertion groove (4) is provided in said lower edge side (22a) or in said upper edge side (22b) of the panel edge (12).

18. A set of panels (1,2) comprising a first (1) and a second panel (2), a panel edge (12) of the second panel (2) being insertable into a core groove (6) of the first panel (1) to obtain a mechanical connection between the first and the second panel, the panel edge (12) being insertable into the core groove (6) by an essentially linear relative displacement of the first and second panel when the first and second panel are arranged essentially in the same plane (MP-1)

said panel edge (12) comprising a separate and flexible tongue (3) and said core groove (6) comprising a tongue groove (5), or said panel edge (12) comprising a tongue groove (5) and said core groove (6) comprising a separate and flexible tongue (3),

wherein the separate and flexible tongue (3) is insertable into the tongue groove (5) for connecting said panels to each other in a first direction, which is parallel to a main plane (MP-1) of the first panel,

wherein the panel edge (12) of the second panel (2) is configured to cooperate with the core groove (6) of the first panel (1) for connecting said panels to each other in a second direction, which is perpendicular to the main plane (MP-1) of the panels (1, 2),

wherein a longitudinal direction of the separate and flexible tongue (3) extends parallel with said panel edge (12) and/or core groove (6), and

wherein the separate and flexible tongue (3) is arranged in an insertion groove (4), said separate and flexible tongue (3) being displaceable inwardly towards a bottom of the insertion groove (4) and outwardly into the tongue groove (5) during a locking of the first and second panel,

characterized in that the separate and flexible tongue (3) comprises a

guiding protrusion (10) at a short edge of the separate and flexible tongue (3), and that the guiding protrusion (10) is configured such that its shape changes during the locking and/or unlocking of the first and second panel, and in that the guiding protrusion (10) is curve shaped and configured to guide a rod shaped tool (9) into the tongue groove (5) when the rod shaped tool (9) is inserted into the insertion groove (4).

19. The set of panels as claimed in claim 18, wherein the guiding protrusion (10) is further configured to be in contact with an inner part of the insertion groove (4) during the locking.

20. The set of panels as claimed in claim 18 or 19, wherein the rod shaped tool (9) comprises an essentially round cross section.