Claims

1. A device (1) for separating a composite safety glass panel (2) along at least one predefinable dividing line (3), wherein the composite safety glass panel (2) has at least one composite film (4) and at least two glass panels (5), wherein the composite film (4) is placed between the glass panels (5) and bonds the glass panels (5) to one another, the device (1) having at least one separating means for separating the glass panels (5) along the at least one dividing line (3) and at least one heating means (6) for heating the composite film (4) at least along the dividing line (3),
   characterized in that
   the heating means (6) contains at least one laser device (7) that has at least multiple adjacently arranged laser beam sources (8), and in that multiple adjacently arranged individual intensity profiles (11) can be generated with the laser device (7) to heat the composite film (4) at least along a segment of the dividing line (3).

2. The device according to claim 1,
   characterized in that
   the multiple adjacently arranged individual intensity profiles (11) form a laser line (10), in particular that the individual intensity profiles (11) overlap at least in part in their edge regions, in order to form the laser line (10), preferably such that a length of an individual intensity profile (11) corresponds to 2 times to 20 times the width of an individual intensity profile (11).

3. The device (1) according to claims 1 or 2,
   characterized in that
   the laser device (7) contains at least one beam-shaping assembly (9) for forming the individual intensity profiles (11), in particular in that the beam-shaping assembly (9) contains at least one lens assembly, preferably in that the lens

assembly contains a lens (12) for multiple laser beam sources (8), or contains at least one lens (12) for each laser beam source (8).

4. The device (1) according to claim 3,
characterized in that
the beam-shaping assembly (9) forms the individual intensity profiles (11), in particular the laser lines (10), from substantially parallel laser radiation in the direction of at least one axis, in particular from entirely parallel laser radiation in the direction of at least one axis.

5. The device (1) according to any of the claims 1 to 4,
characterized in that
the combined length of the multiple individual intensity profiles (11), in particular the length of the laser line (10), corresponds to 30 times the width of an individual intensity profile (11), in particular between 30 times and 1700 times, preferably between 30 times and 333 times the width, or that the combined length of the multiple individual intensity profiles (11), in particular the laser line (10), corresponds to at least the length of the dividing line (3).

6. The device (1) according to any of the claims 1 to 5,
characterized in that
the individual intensity profiles (11), in particular the laser line (10), are straight, or in that at least one individual intensity profile (11), in particular the laser line (10), is curved, at least in part.

7. The device (1) according to any of the claims 1 to 6,
characterized in that
each laser beam source (8) contains at least one laser diode, in particular in that each laser beam source (8) contains an arrangement of multiple laser diodes, preferably a laser diode stack.

8. The device according to any of the claims 1 to 7,
characterized in that
the output of the laser beam source (8) is between 5 W and 50 W, and/or in that the wavelength of the laser radiation emitted from the laser beam source (8) is between 1200 nm and 2200 nm, in particular between 1300 nm and 2100 nm.

9. The device (1) according to any of the claims 1 to 8,
characterized in that
at least a part of the laser device (7), in particular the laser beam sources (8) and/or the beam-shaping assembly (9), is supported such that it can oscillate and/or move, in particular in the longitudinal direction of the dividing line (3).

10. The device (1) according to any of the claims 1 to 9,
characterized in that
the laser beam sources (8) can be controlled individually, preferably in that the laser beam sources (8) can be controlled in groups, in order to set the number of individual intensity profiles (11) or the length of the laser line (10).

11. A method (100) for separating a composite safety glass panel (2), wherein the composite safety glass panel (2) contains at least one composite film (4) and at least two glass panels (5), wherein the composite film (4) is placed between the glass panels (4) and bonds the glass panels (5) to one another, comprising the steps:
- separating (101), in particular mechanical scoring (101a) and breaking (101b), the two glass panels (5) along at least one predefinable dividing line (3);
- heating (102) the composite film (4) along the dividing line (3);
- pulling apart (103) the glass panels (5) along the dividing line (3); and
- separating (104) the composite film (4);

characterized in that
the composite film (4) is heated with multiple adjacently arranged individual

intensity profiles (11) along at least one segment of the dividing line (3) with a laser device (7) that has at least multiple adjacently arranged laser beam sources (8).

12. The method (100) according to claim 11,
characterized in that
the multiple individual intensity profiles (11) collectively form a laser line (10).

13. The method (100) according to claim 11 or 12,
characterized in that
the composite film (4) is heated prior to pulling apart (103) the glass panels (5).

14. The method (100) according to any of the claims 11 to 13,
characterized in that
the composite film (4) is separated (104) by the pulling apart (103) after the heating (102) thereof.

15. The method (100) according to any of the claims 11 to 14,
characterized in that
the composite film (4) is heated (102) at least in part during the separation (101), in particular the breaking (101b), of the two glass panels (5).

16. The method (100) according to any of the claims 11 to 15,
characterized in that
the glass panels (5) are separated by the mechanical scoring (101a) and by the heating (102) of the composite film (4), or that the glass panels (4) are separated (101) by scoring, in particular filamentation, with at least one laser, and by heating the composite film (4).

17. The method (100) according to any of the claims 11 to 16,
characterized in that

the laser device (7) contains at least one beam-shaping assembly (9) for forming the individual intensity profiles (11), and at least a part of the laser device (7), in particular the laser beam sources (8) and/or the beam-shaping assembly (9), at least during the heating (102), is oscillated or moved, in particular in the longitudinal direction of the dividing line (3).

18. The method (100) according to claim 12,
characterized in that
the combined length of the multiple individual intensity profiles (11), in particular the length of the laser line (10), corresponds to at least 30 times the width of the individual intensity profiles (11), in particular between 30 times and 1700 times, preferably between 30 times and 333 times the width, or the combined length of the multiple individual intensity profiles (11), in particular the laser line (10), corresponds to at least the length of the dividing line (3).