Claims:

1. A glass panel (1), comprising:

- a first glass substrate (101),

- a second glass substrate (102),

- a spacer profile (103) at the periphery of the glass panel between the first and the second glass substrate, the spacer being used to maintain an intermediate space (104) between the first and second glass substrates (101, 102), the spacer profile (103) having an outer surface and an inner surface,

- an intermediate substrate (105) in the intermediate space between the first (101) and the second (102) glass substrates, having a first coefficient of thermal expansion

- means (108) to maintain the intermediate substrate within the intermediate space (104).

characterized in that panel (1) comprises further a second profile (100), having a second coefficient of thermal expansion, positioned facing the inner face of the spacer profile (103) within the intermediate space (104) between the first (101) and second (102) glass substrates of the glass panel (1), the said second profile (100) carrying on the means (108) to maintain the intermediate substrate (105) within the intermediate space (104), and wherein the difference between the first coefficient of thermal expansion of the intermediate substrate (105) and the second coefficient of thermal expansion of the second profile (100) is lower or equal to 20%.

2. Glass panel (1) according to claim 1, characterized in that the means consist in :

- at least one first opening (1072) in said upper portion of the second profile 100,

- at least one second opening (1071) in the lower portion of the second profile

(100), the first and the second openings (1071, 1072) being disposed in regard,

- the at least first and second opening (1071, 1072) being designed to lodge at least a portion of the edges (1051, 1052) of the intermediate substrate (105).

3. Glass panel (1) according to claim 1, characterized in that the panel is disposed in a vertical position and the means to maintain the intermediate substrate (105) comprises means, such as glue, to attach an upper portion (1052) of the intermediate substrate (105) to an upper portion (1032) of the second profile (102) and/or to attach an bottom portion (1051) of the intermediate substrate (105) to an upper portion (1031) of the second profile (102).

4. Glass panel (1) of anyone of the preceding claims, characterized in that the intermediate substrate (105) is preferably fixed to the internal faces of the first and second openings (1071, 1072) provided in the second spacer profile (100).

5. Glass panel (1) of anyone of the preceding claims, characterized in that the at least a portion of the edges (upper and lower) of the intermediate substrate (105) is inserted into corresponding first and second openings (1071, 1072) are glued to the internal faces of the first and second openings (1071, 1072).

6. Glass panel (1) of anyone of the preceding claims, characterized in that the second spacer (100) has the same coefficient of thermal expansion than the intermediate substrate (105).

7. Glass panel (1) of anyone of the preceding claims, characterized in that the second profile (100) and the intermediate substrate (105) are made of Poly(methyl methacrylate) material.

8. Glass panel (1) of anyone of the preceding claims, characterized in that the intermediate substrate (105) is an intermediate organic glass substrate (105),

and in that the panel comprises at least one light source (106),

in that the second profile (100) comprises:

means (108) to lodge the at least one light source (106) so as the at least one light source emits light into the intermediate organic glass substrate (105) predominantly along a plane of the panel,

and in that at least part of the intermediate organic glass substrate (105) is arranged to deflect the light out of the plane of the panel and through at least one of the first (101) and second (102) glass substrates to provide a diffused light output.

9. The lighting panel of claim 8, characterized in that the means (108) to lodge at least one light source is a profile embedded into the second profile between the first and the second glass substrates so as to face an edge of the intermediate organic glass substrate

10. The lighting panel of claims 8 and 9, characterized in that the means (108) has a inversed U-shape profile and is made from a metallic material.

11. The lighting panel of claims 8 to 10, characterized in that the means (108) comprises at least a housing (108) being arranged between the first (1071) and the second (1072) openings so as to face an edge (1051) of the intermediate organic glass substrate (105).

12. The lighting panel of anyone of claims 8 to 11, characterized in that the intermediate organic glass substrate (105) is at least partially light diffusive to cause the light to be deflected.

13. The lighting panel of anyone of claims 8 to 12, characterized in that the intermediate organic glass substrate (105) is a Poly(methyl methacrylate) layer.

14. The lighting panel of claim 13, characterized in that the intermediate organic glass substrate (105) is a Poly(methyl methacrylate) layer embedding colorless diffuser particles which cause the light to diffuse forwards.

15. The lighting panel of claim 14, characterized in that the intermediate organic glass substrate (105) and the second profile (100) are made of Poly(methyl methacrylate) material.

1. A glass panel, comprising:

a first glass substrate;

a second glass substrate;

a spacer profile at a periphery of the glass panel between the first and the second glass substrate, the spacer being used to maintain an intermediate space between the first and second glass substrates, the spacer profile having an outer surface and an inner surface;

an intermediate substrate in the intermediate space between the first and the second glass substrates, having a first coefficient of thermal expansion;

means to maintain the intermediate substrate within the intermediate space;

a second profile, having a second coefficient of thermal expansion, positioned facing the inner surface of the spacer profile within the intermediate space between the first and second glass substrates of the glass panel,

wherein the second profile carries the means to maintain the intermediate substrate within the intermediate space, and

wherein a difference between the first coefficient of thermal expansion of the intermediate substrate and the second coefficient of thermal expansion of the second profile is less than or equal to 20%.

2. The glass panel according to claim 1, wherein the means to maintain the intermediate substrate within the intermediate space comprises:

at least one first opening in an upper portion of the second profile,

at least one second opening in a lower portion of the second profile, the first and the second openings being disposed in regard,

the at least first and second openings being designed to lodge at least a portion of edges of the intermediate substrate.

3. The glass panel according to claim 1, wherein the panel is disposed in a vertical position and the means to maintain the intermediate substrate comprises means to attach an upper portion of the intermediate substrate to an upper portion of the second profile and/or to attach a bottom portion of the intermediate substrate to a bottom portion of the second profile.

4. The glass panel of claim 1, wherein the intermediate substrate is preferably fixed to the internal faces of the first and second openings provided in the second spacer profile.

5. The glass panel of claim 2, wherein the at least a portion of the edges (upper and lower) of the intermediate substrate is inserted into corresponding first and second openings and glued to internal faces of the first and second openings.

6. The glass panel of claim 1, wherein the second spacer has a same coefficient of thermal expansion as the intermediate substrate.

7. The glass panel of claim 1, wherein the second profile and the intermediate substrate are made of Poly(methyl methacrylate) material.

8. A lighting panel comprising the glass panel of claim 1, further comprising:

at least one light source,

wherein the intermediate substrate is an intermediate organic glass substrate,

wherein the second profile further comprises means to lodge the at least one light source so as the at least one light source emits light into the intermediate organic glass substrate predominantly along a plane of the panel,

and in that at least part of the intermediate organic glass substrate is arranged to deflect the light out of the plane of the lighting panel and through at least one of the first and second glass substrates to provide a diffused light output.

9. The lighting panel of claim 8, wherein the means to lodge at least one light source is a profile embedded into the second profile between the first and the second glass substrates so as to face an edge of the intermediate organic glass substrate.

10. The lighting panel of claim 8, wherein the means to maintain the intermediate substrate within the intermediate space has a inversed U-shape profile and is made from a metallic material.

11. The lighting panel of claim 8, wherein the means comprises at least a housing being arranged between the first and the second openings so as to face an edge of the intermediate organic glass substrate.

12. The lighting panel of claim 8, wherein the intermediate organic glass substrate is at least partially light diffusive to cause the light to be deflected.

13. The lighting panel of claim 8, wherein the intermediate organic glass substrate is a Poly(methyl methacrylate) layer.

14. The lighting panel of claim 13, wherein the intermediate organic glass substrate is a Poly(methyl methacrylate) layer embedding colorless diffuser particles which cause the light to diffuse forwards.

15. The lighting panel of claim 14, wherein the intermediate organic glass substrate and the second profile are made of Poly(methyl methacrylate) material.