spent on baking out the solvent present in the individual film layers increases proportionally.

Conversely, it is of course the case that the thinner the film layer is formed, the baking-out time is reduced accordingly. The thickness of the film layer cannot however be freely selected, but rather is determined by the given demands on such a film layer. Notwithstanding this, it is the case that the process step of baking-out when using solvent-containing polymer solutions is absolutely essential and at all events has the effect of impeding the process flow.

The problem as per embodiments of the present invention, therefore, is to develop the generic devices and methods for coating substrate in such a way that efficient coating is enabled, in particular when used in bonding.

According to an aspect, there is provided a device for coating a first substrate and/or a second substrate with a film layer, characterised in that the device comprises application means for applying a thermoplastic film layer material and distribution means for distributing the film layer material on the first substrate and/or the second substrate for the formation of the film layer, wherein the application means comprise at least one extruder device, and wherein the distribution means comprises heating means for heating the first substrate and/or the second substrate during the application of the film layer material.

All combinations of at least two features given in the description, in the claims and/or the drawings also fall within the scope of the invention. In the case of value ranges, values lying inside the stated limits are also deemed to be disclosed as limiting values and can be claimed in any combination.

The basic idea of embodiments of the present invention is to use an in particular solvent-free thermoplastic for the coating of a substrate with a film layer, said thermoplastic being applied by means of a device (application means) suitable for applying the thermoplastic.

CLAIMS

1. A device for coating a first substrate (6) and/or a second substrate with a film layer, characterised in that the device comprises application means (1) for applying a thermoplastic film layer material (4) and distribution means for distributing the film layer material (4) on the first substrate (6) and/or the second substrate for the formation of the film layer, wherein the application means (1) comprise at least one extruder device (1), and

wherein the distribution means comprises heating means for heating the first substrate (6) and/or the second substrate during the application of the film layer material (4).

2. The device according to claim 1, wherein the distribution means comprise rotation means for rotating the first substrate (6) and/or the second substrate during the application of the film layer material (4).

3. The device according to claim 1, wherein the heating means are constituted in such a way that the first substrate (6) and/or the second substrate can be subjected to different heating temperatures, in particular diminishing from a concentric centre (5) towards an edge region (11).