Claims

1. A method for welding uniaxially stretched renewable raw materials,
characterized in that

a. surfaces to be welded are at least partially provided from stretched renewable raw material; and

b. the surfaces are welded using heated wedge welding, friction welding, laser welding, high frequency welding or ultrasonic welding.

2. The method as recited in Claim 1,
characterized in that a uniaxially stretched tape, exceptionally preferably a uniaxially stretched strapping tape, is used in step a).

3. The method as recited in one of Claims 1 or 2,
characterized in that, in step a), the renewable raw material is selected from the group of aliphatic polyesters, polyamide, aliphatic polyester amide, polyhydroxyalkanoate, polyvinyl alcohol, polyalkylenglycol, lignin or a copolymer which contains at least one of the compounds, or mixtures or derivatives thereof, in particular the renewable raw material poly lactic acid or polybutylene succinate or a mixture or a derivative thereof.

4. The method as recited in Claim 3,
characterized in that a poly lactic acid is used which is made at least of 40 wt.% L-lactic acid, in particular at least 90 wt.% L-lactic acid.

5. The method as recited in one of Claims 1 through 4,
characterized in that a welding time between 5 milliseconds and 1 second is set in step b).

6. The method as recited in one of Claims 1 through 5,
characterized in that a cooling time between 0 and 3 seconds is set in step b).

7. A strapping tape which is welded with itself, manufactured according to the method as recited in Claim 1,

characterized in that the tear strength is at least 5 N/mm^2, measured according to DIN 53540.

CLAIMS

1. Method for welding uniaxially stretched renewable raw material, characterized in that the method comprises:

(a) using a uniaxially stretched strapping tape comprising surfaces to be welded, wherein the surfaces are at least partially provided from stretched polylactic acid; and

(b) welding the surfaces by using ultrasonic welding,

wherein the renewable raw material consists of polylactic acid, and wherein the polylactic acid is made at least of 90 wt. % L-lactic acid, and

wherein a welding time in the step (b) is between 100 and 400 milliseconds.

2. The method according to claim 1, wherein a cooling time in the step (b) is between 0 and 3 seconds.