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**Wang**

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(54) **DIMENSIONALLY STABLE RECYCLABLE PLASTIC PACKAGE**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(51) **Int. Cl.**

**B32B 27/32** (2006.01)

**B32B 27/08** (2006.01)

**B32B 7/035** (2019.01)

**B32B 27/30** (2006.01)

(52) **U.S. Cl.**

CPC ..... **B32B 27/32** (2013.01); **B32B 27/08** (2013.01); **B32B 27/306** (2013.01); **B32B 2250/24** (2013.01); **B32B 2270/00** (2013.01); **B32B 2323/043** (2013.01); **B32B 2323/046** (2013.01); **B32B 2439/70** (2013.01)

(58) **Field of Classification Search**

CPC ..... **B32B 27/32**; **B32B 27/08**; **B32B 27/306**; **B32B 2250/24**; **B32B 2270/00**; **B32B**

2323/043; **B32B 2323/046**; **B32B 2439/70**; **B29L 2009/00**; **B29L 2023/001**; **B29L 2023/22**; **B29K 2995/0053**; **B29C 35/041**; **B29C 35/06**; **B29C 53/10**; **B29C 55/28**; **B29B 13/024**

See application file for complete search history.

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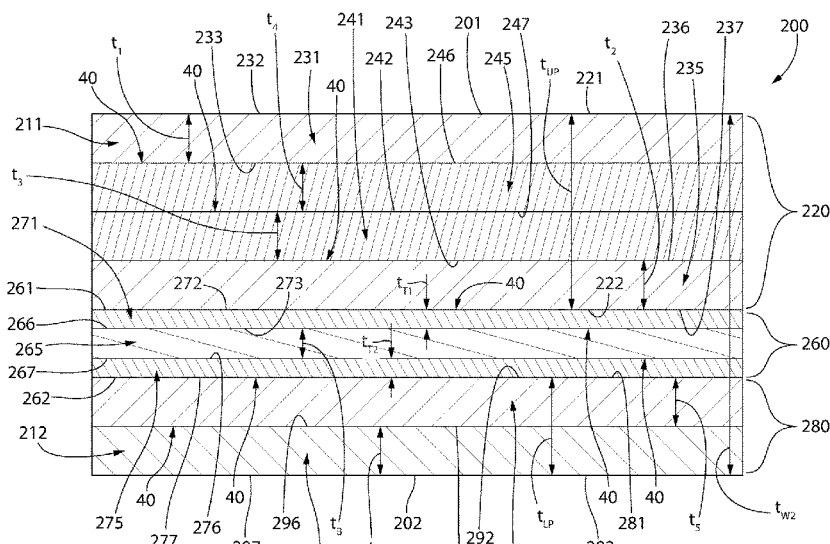
\* cited by examiner

Primary Examiner — Yan Lan

(57) **ABSTRACT**

Described herein is a sheet comprising: a multi-layer structure comprising: a plurality of layers including an uppermost layer and a lowermost layer, each of the plurality of layers having a molecular orientation that results in a stress value for each layer; wherein the stress value of at least two of the plurality of layers are non-zero and different from one another; and wherein the multi-layer structure has a net stress value that is less than the greater stress value of the plurality of layers.

**10 Claims, 18 Drawing Sheets**



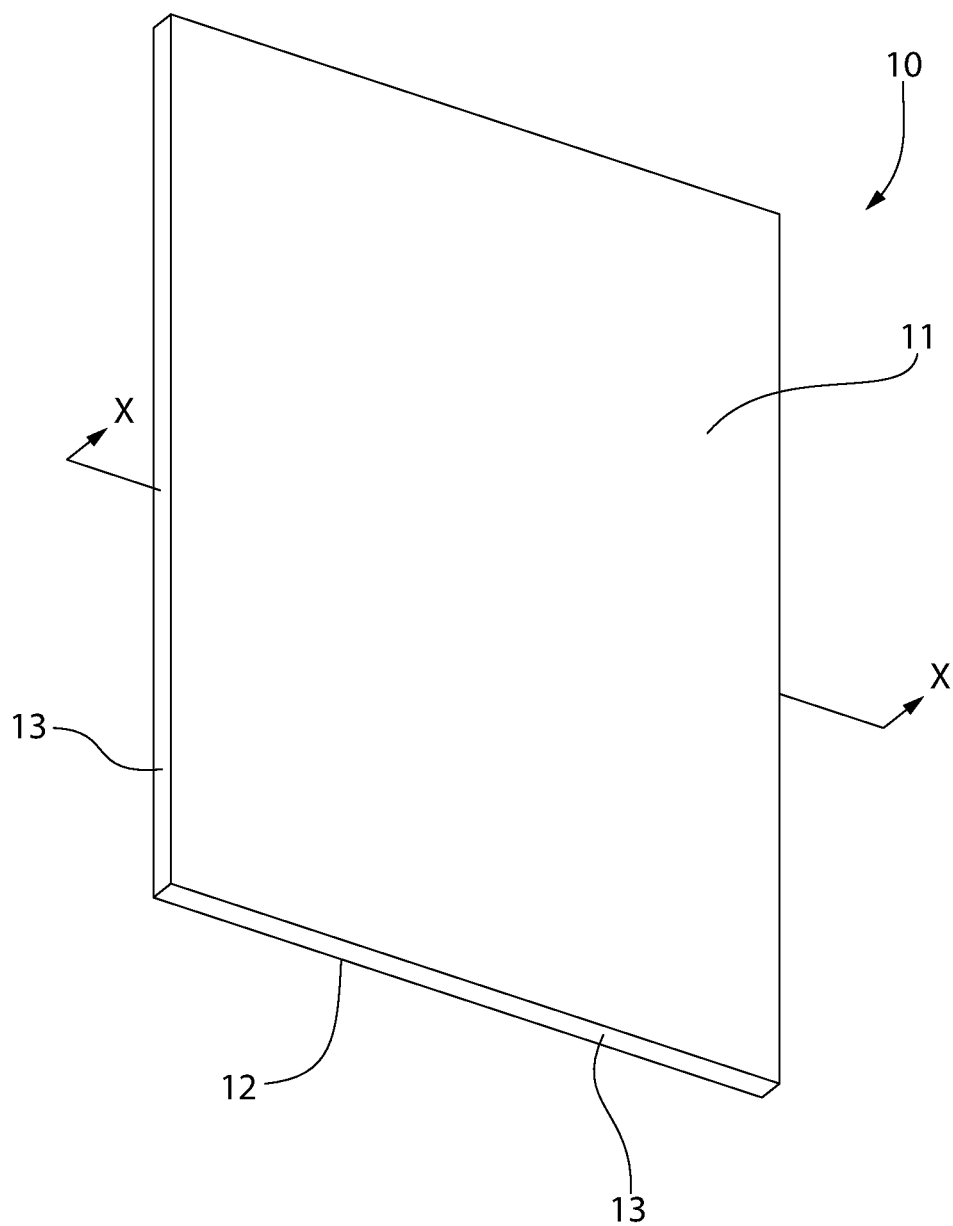


FIG. 1

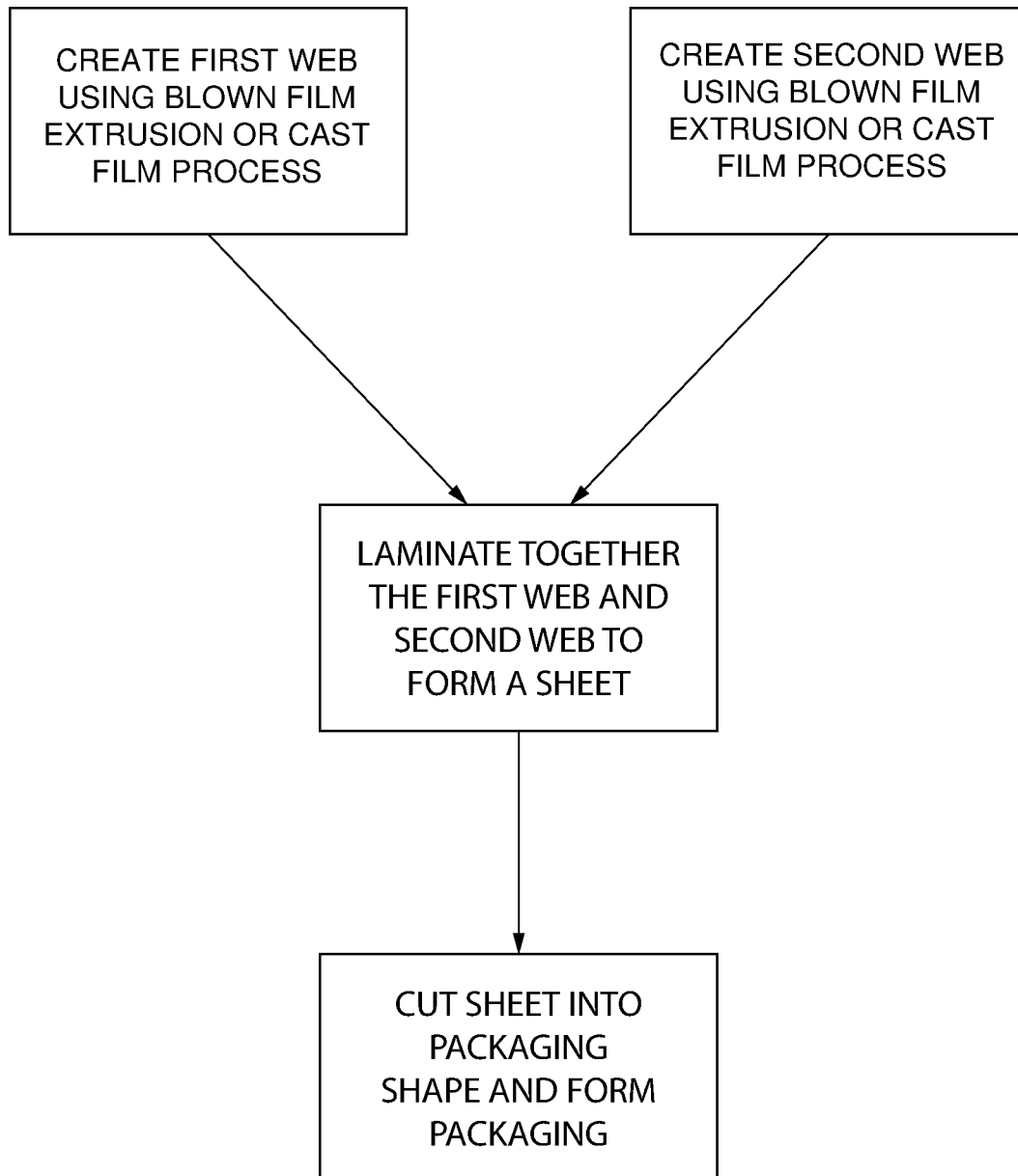


FIG. 2

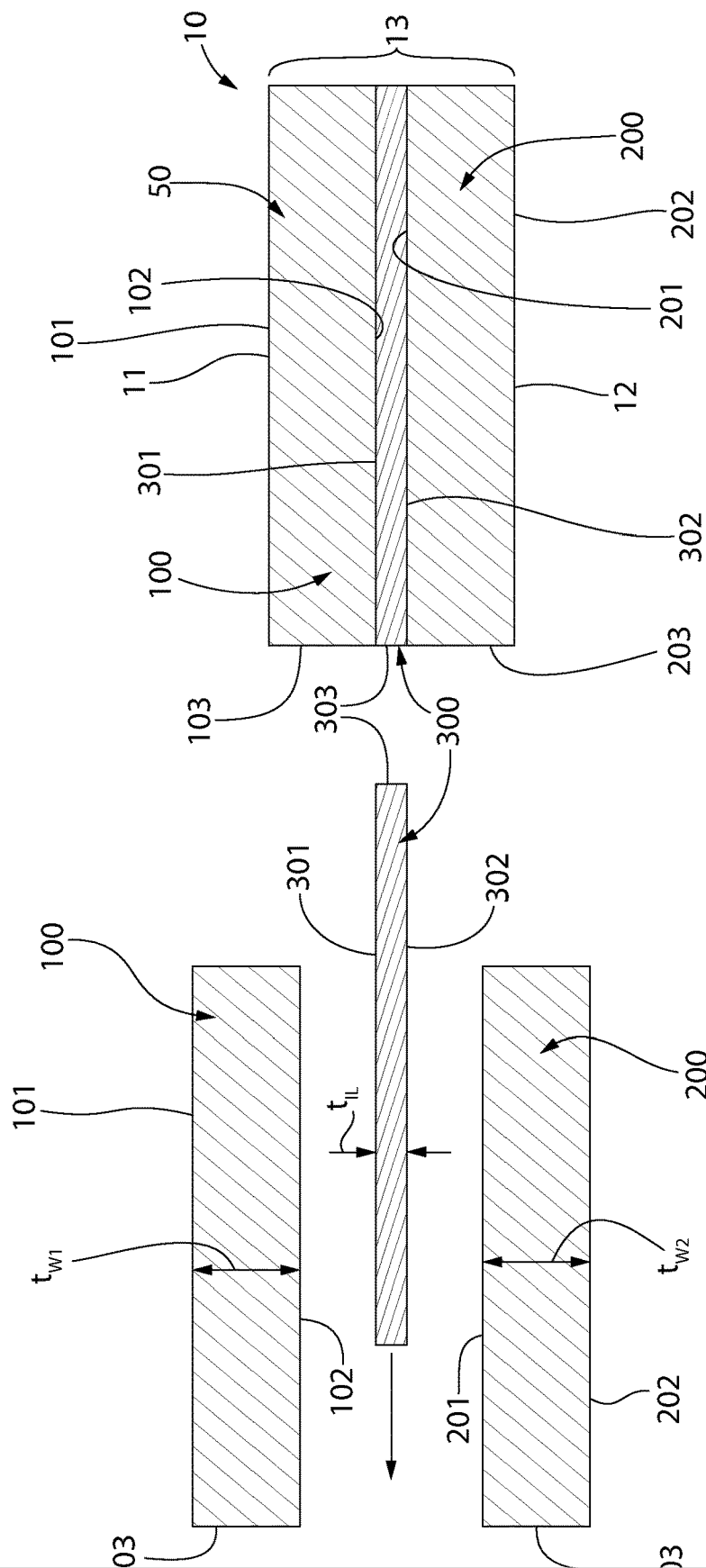


FIG. 3

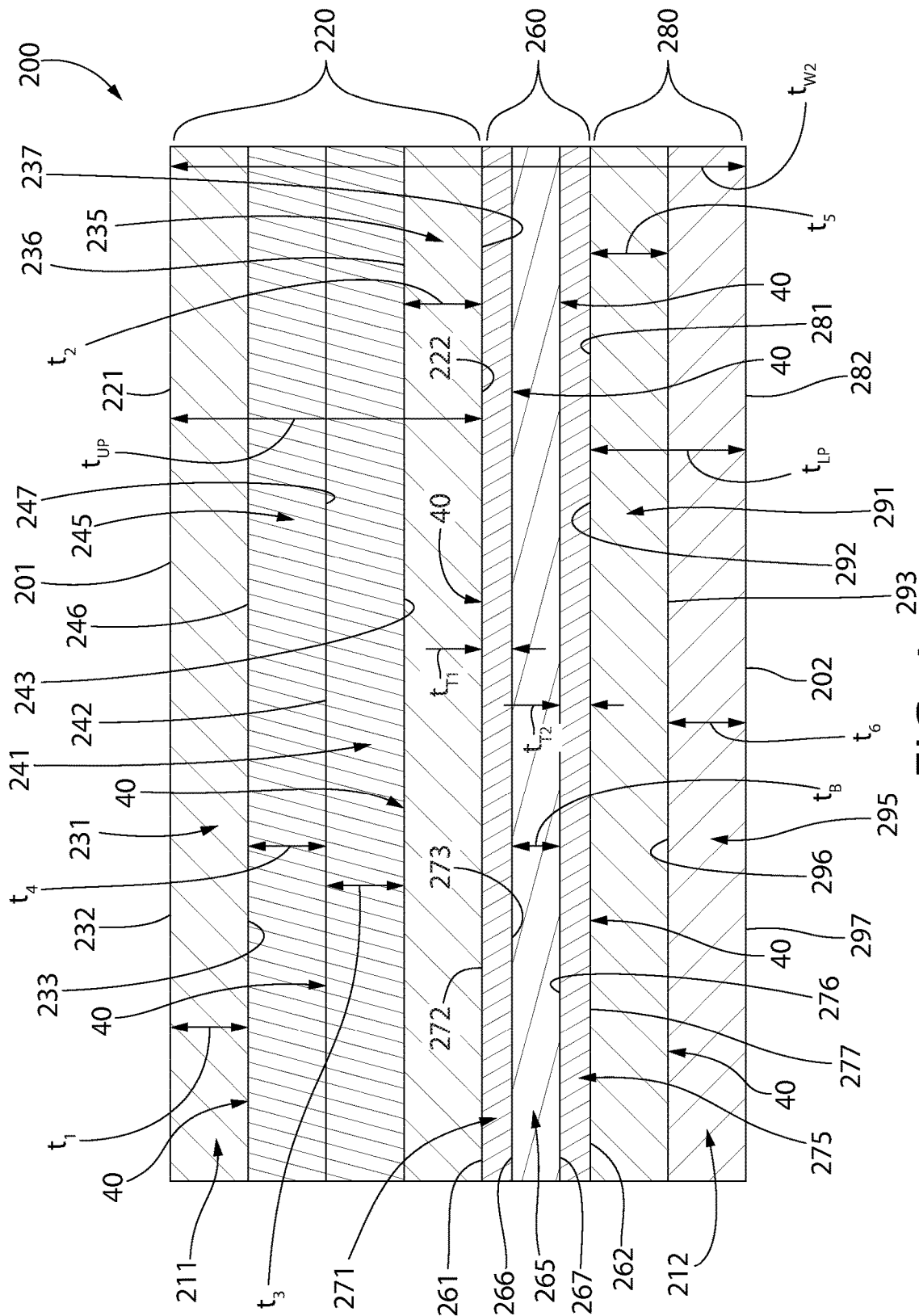


FIG. 4

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