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(54) Title: CUSHIONING CONVERSION MACHINE AND METHOD WITH STITCHING ASSEMBLIES**(57) Abstract**

A cushioning conversion machine, method and product characterized by a connecting assembly that provides a mechanical interlock between overlapped portions of sheet-like stock material to prevent "unzipping" of a low density cushioning product produced by the cushioning conversion machine. The connecting assembly comprises a pair of rotatable stitching members, a first one (102) having a plurality of radially outwardly extending projections (120), or teeth, around the circumference thereof, with the projections having at least two axially spaced apart segments defining a recess therebetween. The second stitching member (100) includes at least one axial punch segment (132) which includes a peripheral edge portion dimensioned to be received in the recess in the first stitching member during rotation of the stitching members. The peripheral edge portion is cooperative with the projections of the first stitching member to produce at each corner edge thereof a row of slits in the overlapped portions of the sheet-like stock material, thereby forming at least one row of tabs for interlocking the overlapped portions of the stock material. The second stitching member may include another axial segment relatively adjacent the punch segment, such other axial segment having a plurality of radially outwardly extending projections (120) meshing with the projections of one of the axial segments of the first stitching member. The stitching members may be formed by a plurality of flat disc members stacked side-by-side with the several axial segments being formed by one or more of the flat disc members.

