

ABSTRACT

Apparatus and methods are presented herein for uniformly sealing and peeling a cover tape to/from a carrier tape. The carrier tapes of the present invention include surface transitions that minimizes/eliminates surface irregularities and distortions such that the cover tapes can be uniformly sealed and peeled from the carrier tapes. The surface transitions act as physical barriers to prevent propagation of surface irregularities and distortions from the thermoformed pocket area into the heat bonding zones. The surface transitions also act as stiffening members to keep the heat bonding zones as flat as possible during subsequent handling of the carrier tape. The surface transitions may be in the form of continuous or intermittent ribs, step portions, or single or double sided grooves. Depressed portions in between the pockets can also be used to minimize the presence of surface distortions on the bonding zones.