

ABSTRACT

FILM STRETCHING APPARATUS

5 A film stretching apparatus is disclosed and includes a supply roller, a heating zone, a stretching zone, a cooling zone, and a take-up roller in sequence. A plurality of idler rollers are provided in each zone. Drive rollers and cooling rollers in the cooling zone have a speed greater than drive rollers and heater rollers in the heating zone. In operation, film delivered from the supply roller is heated and
10 softened by the heater rollers, flattened by idler rollers in the stretching zone, and cooled and fixed in shape by the cooling rollers as the film winding through and frictionally engaging the rollers prior to wrapping up on the take-up roller. The produced stretched film can maintain its original width and transparency by prolonging to a desired optimum stretch.

15

Figure 3