HEAT TRANSFER SHEET FOR ROTARY REGENERATIVE HEAT EXCHANGER

ABSTRACT

A heat transfer sheet [60,160,260,360] for a rotary regenerative heat exchanger is shaped to include sheet spacing features [59], which provide spacing between adjacent heat transfer sheets [60,160,260,360], and undulation surfaces [68,70] (corrugations) in the sections between the sheet spacing features [59]. The undulation sections [68,70] are constructed of regularly spaced lobes [64,72] extending at an angle with respect to the spacing features [59]. The undulating sections [68,70] impart turbulence in the air or flue gas flowing between the heat transfer sheets [60, 160, 260, 360] to improve heat transfer. The heat transfer sheets [60,160,260,360] may include undulating surfaces that differ in angle of their lobes [64,72].

Figure 5