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(54) Title of the Invention: Centrifugal compressor impeller with a particular blade tip shape
Abstract Title: Centrifugal compressor impeller with a particular blade tip shape

(57) An impeller element for a compressor is formed with an upstream region in which the radial extent of each impeller blade decreases in the downstream axial direction. At positions axially in register with this region, the radial position of the shroud surface is constant or increasing in the downstream axial direction, so the spacing between the free edge of the blade and the shroud surface increases in the downstream axial direction. This is found to lead to surprising increases in the efficiency of the compressor, particularly for low rotational speeds.

Fig. 3

