

ABSTRACT

SYSTEM AND METHOD OF PUMPING WHILE REDUCING SECONDARY FLOW EFFECTS

The pumping component, e.g. an impeller or diffuser, has one or more vanes 58 defining fluid flow paths. To improve the pumping performance of the component, it is case with a passage 60 formed through each of at least one vane 58 such that an end of the passage is exposed to a low energy flow, i.e. secondary flow, region. The or each passage 60 enables the flow of a small amount of fluid from the low energy region to an opposite side of the vane 58 to reduce the secondary flow effects and improve pumping efficiency.

Fig. 1