

Flow Device, Which Is Externally or Passively Powered, for a Liquid or Gaseous Medium, Comprising an Impeller Which Is Mounted in a Housing and Through Which the Medium Can Flow in the Axial Direction, and Use of Such a Flow Device

Abstract

The invention relates to a flow device, which is externally or passively powered, for a liquid or gaseous medium, consisting of a housing that is equipped with an impeller through which the medium can flow in the axial direction. The impeller can be rotated by an external drive or by the medium, wherein the impeller comprises an annular body with impeller vanes, said annular body being supported in the housing on the outer circumference of the annular body and having an axially central passage. A swirl combined with a pressure gradient which increases from the outer circumference to the axially central passage of the impeller is applied to the medium.

Fig. 4