

[54] CASE CONSTRUCTION FOR MULTI-STAGE PUMP

[75] Inventor: Richard M. Nelson, Portland, Oreg.

[73] Assignee: Guy F. Atkinson Company, Portland, Oreg.

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Primary Examiner—Leonard E. Smith  
 Attorney, Agent, or Firm—Klarquist, Sparkman, Campbell, Leigh, Hall & Whinston

[57] ABSTRACT

A double-case, multi-stage, centrifugal pump having a plurality of impellers mounted on a common shaft at axially spaced pump stages. The first pump stage is housed within a unitary forward case section of a three-section inner case assembly. Subsequent stages are housed within two rearward case sections disposed in axial joint-forming relationship with each other and radial joint-forming relationship with the forward case section. The inner case assembly is supported within an outer case assembly which provides a suction chamber surrounding the forward case section and a discharge chamber surrounding the rearward case sections, the inner and outer case assemblies being constructed in such manner that the pressure in the discharge chamber sealably forces the inner case sections together during operation of the pump.

7 Claims, 3 Drawing Figures

