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(54) Title: PREDICT BRAKE HORSEPOWER FOR A PUMP FOR VISCOUS APPLICATIONS

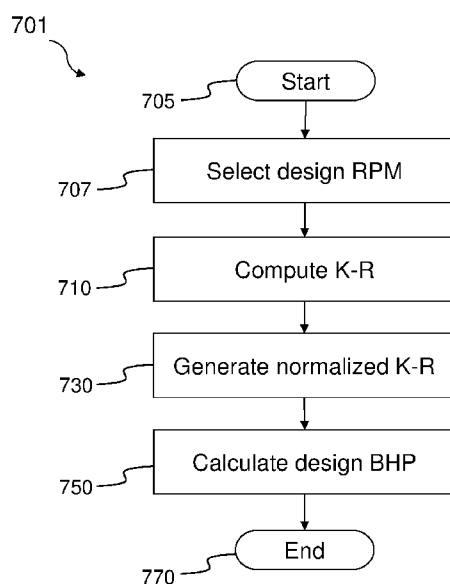


Fig. 7A

(57) Abstract: This disclosure presents a dimensionless relationship between a fluid flow rate, a viscosity, and a brake horsepower (BHP) in a pump operation and a method that uses the dimensionless relationship to predict a BHP for viscous performance of a pump from water performance specifications. Using the dimensionless relationship, *i.e.*, K-R number, the methods determine a BHP correlation that allows the prediction of the BHP specification to satisfy a pump performance metric at any given speed, flow rate, and viscosity. This prediction can be calculated from water performance specifications without physically testing the pump in the viscous implementation environment.



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