United States Patent [19]

Gibney et al.

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[54]	METHOD FOR BEVERAGE BLENDING AND		4,718,44
	PROPORT	4,732,58	
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[21] Appl. No.: 482,363[22] Filed: Feb. 20, 1990

Related U.S. Application Data

[63]	Continuation-in-part of Ser. No. 416,813, Oct. 3, 1989,
	abandoned.

	abandoned.	
[51]	Int. Cl.5	A23L 2/00
	U.S. Cl	
		426/590
[58]	Field of Search	426/231, 477, 590;
		99/275

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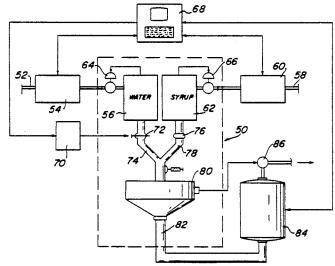
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Primary Examiner—George Yeung Attorney, Agent, or Firm—Seide, Gonda, Lavorgna & Monaco

[57] ABSTRACT

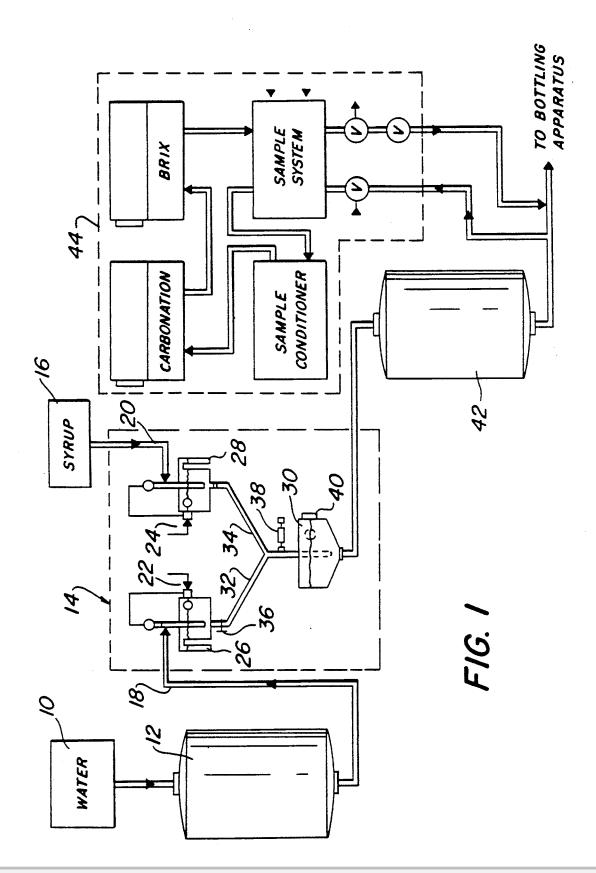
The present invention relates to a method and apparatus for improving quality and increasing syrup yield within a beverage proportioning system. The method and apparatus of the present invention is contemplated to be adaptable to existing proportioning and blending systems to provide a highly accurate control of the proportional blending. This control is a function of the mass flow of the components input to the proportioner. From this mass flow determination and adjusted volumetric flow value for each component is determined. The ratio of the calculated volumetric flow of the water to the syrup is used to determine a signal to control the proportional blending. Adjustment of the blend ratio is made by comparing the calculated ratio to the set beverage values. The invention also determines the accuracy of the adjustment and the efficiency of the overall blending and proportioning system.

18 Claims, 7 Drawing Sheets





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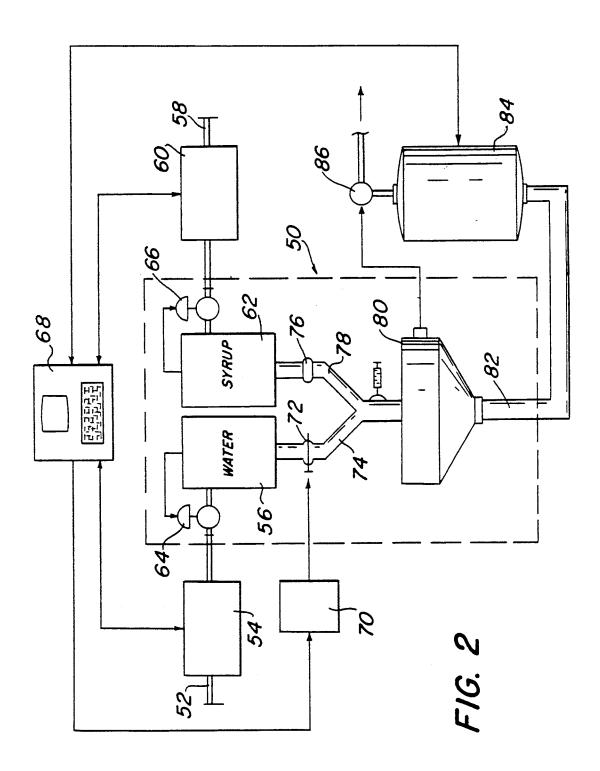




FIG. 3

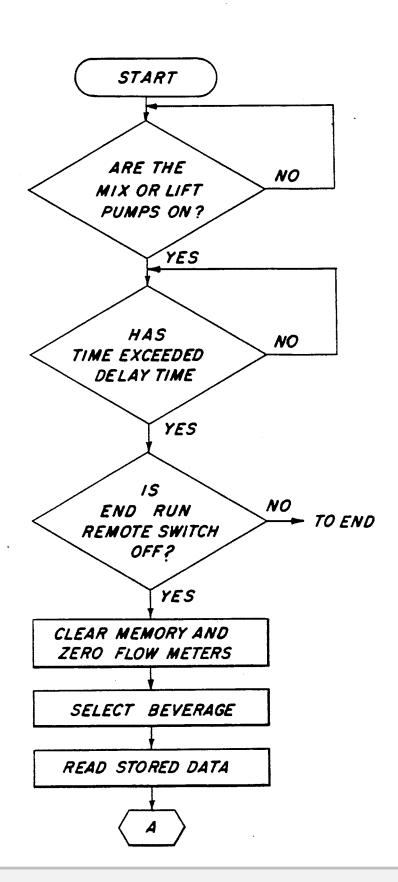
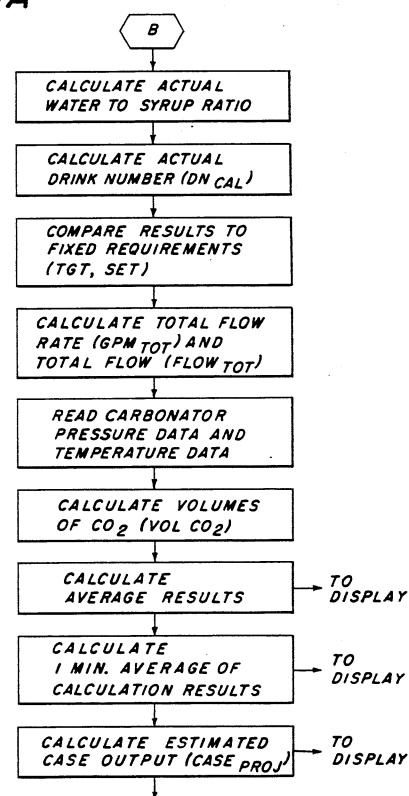


FIG. 3A



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