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(54) Title: IMPROVED DYNAMICS GAS BLENDING SYSTEM AND PROCESS FOR PRODUCING MIXTURES WITH MINIMAL VARIATION WITHIN TOLERANCE LIMITS AND INCREASED GAS UTILIZATION

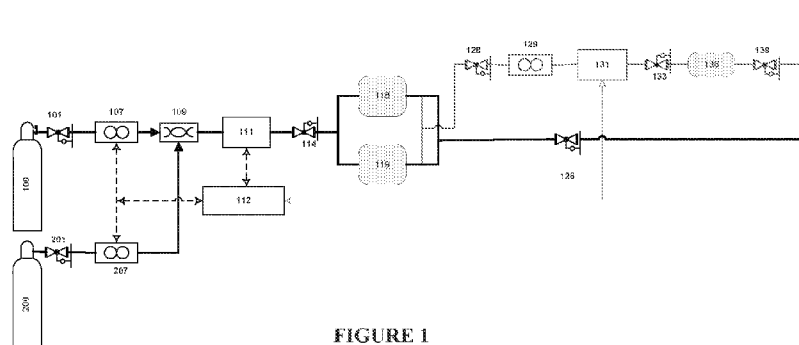


FIGURE 1

(57) Abstract: A dynamic blending system and process to produce a mixture of a desired target concentration with minimal tolerance variation and no waste gas generation is provided. The mixture made from the blending process can be utilized without the need to vent. The inventive system and process enables the ability to perform relatively small adjustments to the concentration of the blended gas mixture. The system and process also includes specifically designed sampling protocols that reduce measurement error.