ABSTRACT

DUAL MODE EMERGENCY BRAKING APPARATUS AND METHOD OF USE THEREOF

A dual mode brake system includes a first fluid actuated brake and a second spring actuated fluid released brake configured to spring actuate the first brake in the absence of receiving sufficient fluid pressure at the second brake. A first fluid control circuit variably supplies fluid to the first brake from a source of pressurized fluid. A second fluid control circuit controllably supplies fluid to the second brake from the source of pressurized fluid. The third fluid control circuit controllably supplies fluid to the second brake based on the pressure of the fluid received by the third fluid control circuit from the first fluid control circuit and the pressure of the fluid received by the third fluid control circuit from the second fluid control circuit.

(Please note that Figure 1 should accompany the abstract when published)