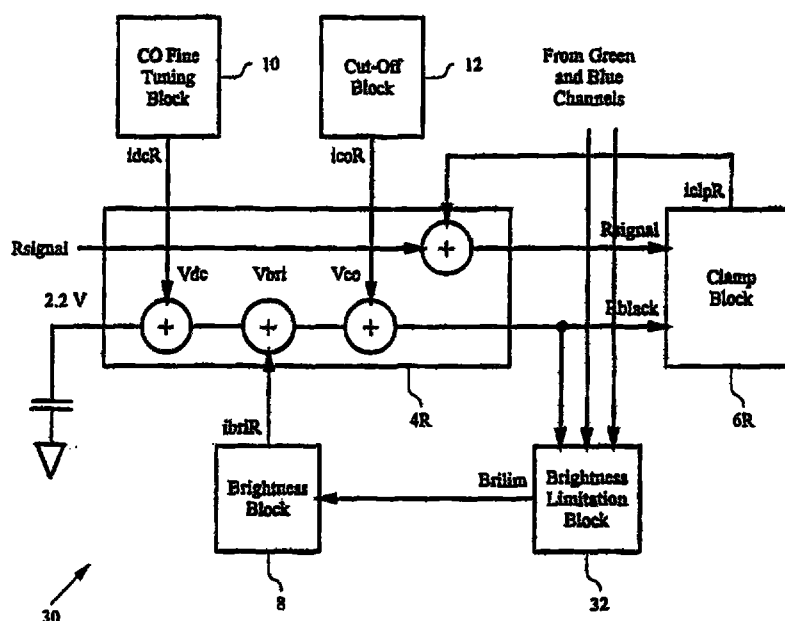




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(54) Title: AUTOMATIC BRIGHTNESS LIMITATION FOR AVOIDING VIDEO SIGNAL CLIPPING



(57) Abstract

Television circuits which operate at low voltages can have difficulties with signal clipping effects. Accordingly, a brightness limitation system is employed in such a television circuit to prevent the black reference voltage level and the video signal from entering a minimum signal clipping zone, to provide a precise correction signal, limiting the brightness, to maintain a constant black reference voltage level, and maintain a video signal with dynamic amplitude. The brightness limitation circuit detects a minimum signal level amongst the black reference signals from each colour channel and compares the minimum signal with a fixed voltage level to generate a brightness feedback signal. The brightness feedback signal is then used to modify the black reference signal level for each colour channel.