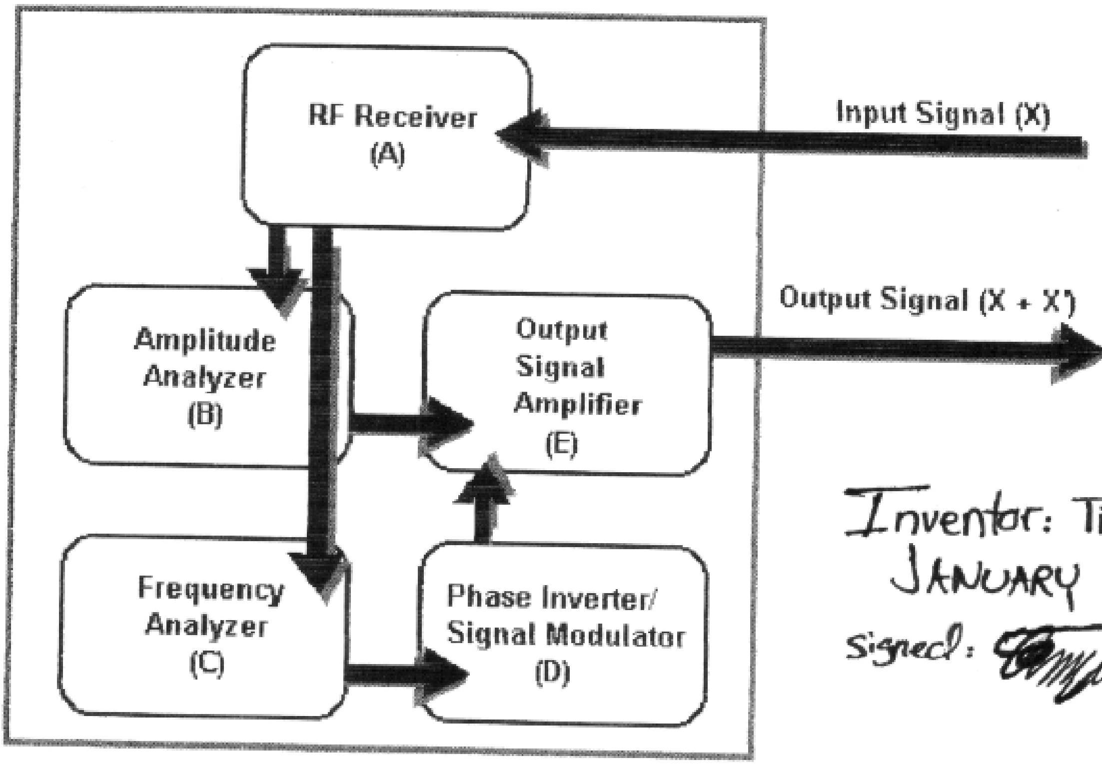

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Signed:

Operating Schematic for a Phase-Shifting Electromagnetic Wave Cancellation Device

The Above Schematic illustrates the general system of operations for a device used to cancel electromagnetic waves.

First, the input signal (X) is assimilated into the phase-cancellation device by RF Receiver (A). Although this particular receiver is tuned to the RF (Radio Frequency) band, it is not theoretically impossible to utilize a receiver covering different (or all) parts of the electromagnetic spectrum. An effective RF receiver should be a miniaturization of the typical radar wave receiver, simply because this device is meant to cancel radar waves.

Second, the RF signal is split, and one part is sent to an amplitude analyzer (B). This stage of the device will analyze to amplitude (signal strength) of the RF signal, as well as control the signal amplification of the phase-shifted return signal. Since the phase-shifted return must be exactly (or at least very close) to the same amplitude as the return that is reflected off the airborne vehicle carrying the phase-cancellation device, the analyzer must be calibrated to adjust the amplitude according to 1: The airborne vehicle's composition; 2: the strength of the input signal; 3: The size of the airborne vehicle, and specific shape characteristics.

The frequency analyzer (C) receives the other part the of split input signal from RF receiver (A). The frequency analyzer must analyze and then replicate the signal characteristics of the input signal, and must also adjust them according to some characteristics of the airborne vehicle. The signal returned by the phase-cancellation device must also have an identical frequency as the naturally reflected return. After analyzing and adjusting the frequency of the input signal received from (A), the analyzer sends the its output signal on to (D).

The Phase Inverter/Signal Modulator (D) receives the calibrated input signal from (C), and then phase-shifts that signal exactly 180 Degrees from the input signal. The Phase inverter must also insure that the frequency of the signal is not distorted in any way, before passing the signal along to (E).

The Output Signal Amplifier receives instructions from both units (B) and (D)--and thus brings the two parts of the signal together again. The output signal amplifier must take the adjusted/shifted signal from (D), and then amplify it according to the instructions it receives from (B)--the amplitude analyzer. After recombining the signal characteristics from both units, the amplifier must amplify the signal to the necessary level, and then transmit the modified output signal (X') back with the naturally reflected return signal (X).

Fig. 1

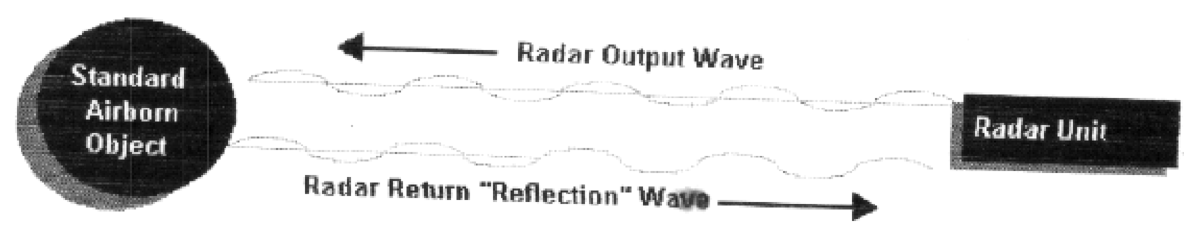
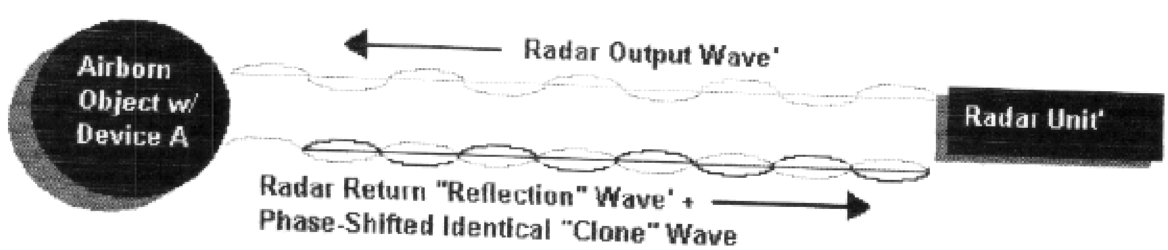


Fig. 2



Radar Wave Cancellation Schematic:

Utilizing the above illustrations (Fig.1 & Fig.2), it is possible to see the effects of electromagnetic wave cancellation on a radar return wave. Since, in simplified form, a radar "air-warning" mechanism--a device for detecting airborne objects, and locating their speeds and trajectories--does little more than "bounce" radio waves off of any available airborne objects and then measure the return rate--if any--of reflected those radio waves, a device (A) capable of cancelling the reflected radio waves would render the radar device incapable of detecting an airborne object carrying the negating device.

Figure 1 illustrates the interaction between a standard radar detector and an ordinary airborne object, such as an aeroplane. The radar unit first sends out a scattering of radio waves in the general direction of the aeroplane, denoted by the gray sine wave denoted "Radar Output Wave". The radar output wave is reflected from the aeroplane's exterior in a varying intensity, depending on the aeroplane structural composition. At least some portion of the radar output wave is reflected reflected back to the radar transmitter/receiver, and denoted as the "radar return wave"--another gray sine wave. Due to the "Doppler effect"--a frequency shift of the radar return wave--a comparison of the output and return waves will show differences in frequency, as well as other minor deviations, that allow a modern radar unit to quite accurately describe certain aspects of the aeroplane's movement--speed, trajectory, etc.

Figure 2 illustrates the effects of a phase-cancellation device on the standard radar return wave. As with figure 1, the radar unit sends out an output wave, which is reflected in the same manner as before from the aeroplane. However, the aeroplane contains this time a device denoted "device A", which measures the radar wave's frequency, amplitude, and other characteristics. The device, after analyzing and replicating the radar waves, then transmits an identical radar wave back toward the radar transmitter/receiver. This "clone" wave is completely identical to the wave returning to the radar unit, except for one characteristic--it is "phase-shifted" by exactly 180 degrees. This phase-shifting in actuality cancels the radar return wave, and thus, the radar transmitter/receiver is "fooled" into believing that no aeroplane (or any airborne object using such a device) is actually within range.....