CLAIMS

1.- A wire antenna (2) for submarines (4) comprising a coaxial cable (6) and a radiating element (8), one end of which is connected to the coaxial cable and dimensioned for transmitting high frequency waves, between 3 MHz and 30 MHz, the antenna (2) being characterized in that it comprises at least one isolation filter (14) positioned on the radiating element (8) of the wire antenna (2).

2.- The wire antenna (2) according to claim 1, characterized in that said or each isolation filter (14) is a circuit comprising an inductor (16) and a capacitor (18) in parallel.

3.- The wire antenna (2) according to any of claims 1 to 2, characterized in that said or each isolation filter (14) is positioned at a distance equal to the quarter of a wavelength of a high frequency wave to be transmitted, from the end of the radiating element (8) connected to the coaxial cable (6).

4.- The wire antenna according to claim 3, characterized in that said or each distance is comprised between the quarter of the wavelength of a high frequency wave in water and the quarter of the wavelength of a high frequency wave in air.

5.- The wire antenna according to any of claims 1 to 4, characterized in that it comprises at least first and second isolation filters (14) successively positioned along the radiating element (8) of the wire antenna (2).

6.- The wire antenna according to any of claims 1 to 5, characterized in that the wire antenna (2) has a length substantially comprised between 10 and 40 m.

7.- The wire antenna according to any of claims 1 to 6, characterized in that the radiating element is capable of receiving very low frequency waves between 3 kHz and 30 kHz.

8.- A transmission system characterized in that it comprises a transmitter of waves with high frequencies comprised between 3 MHz and 30 MHz and a wire antenna (2) according to any of claims 1 to 7 for transmitting these waves.

9.- The transmission system according to claim 8, characterized in that it comprises a receiver for waves of very low frequencies comprised between 3 kHz and 30 kHz and of high frequencies comprised between 3 MHz and 30 MHz, the receiver being connected with the same wire antenna for receiving these waves.

10.- A submarine vehicle characterized in that it includes a transmission system according to any of claims 8 to 9.

CLAIMS

1.- A wire antenna (2) for submarines (4) comprising a coaxial cable (6) and a floating radiating element (8), one end of which is connected to the coaxial cable (6), the radiating element (8) being dimensioned for receiving very low frequency waves, between 3 kHz and 30 kHz, the antenna (2) being characterized in that it comprises at least one isolation filter (14) electrically interposed between two radiating segments of the radiating element (8), the or each isolation filter (14) being a trap circuit, so that the radiating element (8) is adapted to transmit high frequency waves, between 3 MHz and 30 MHz.

2.- The wire antenna (2) according to claim 1, characterized in that said or each isolation filter (14) is positioned, relative to the end of the radiating element (8) connected to the coaxial cable (6), at a distance equal to the quarter or three-quarters of a wavelength of a high frequency wave to be transmitted.

3.- The wire antenna according to claim 2, characterized in that said or each distance is comprised between the quarter of the wavelength of a high frequency wave in water and the quarter of the wavelength of a high frequency wave in air.

4.- The wire antenna according to any of claims 1 to 3, characterized in that it comprises at least first and second isolation filters (14) successively positioned along the radiating element (8) of the wire antenna (2).

5.- The wire antenna according to any of claims 1 to 4, characterized in that the wire antenna (2) has a length substantially comprised between 10 and 40 m.

6.- A transmission system characterized in that it comprises a transmitter of waves with high frequencies comprised between 3 MHz and 30 MHz and a wire antenna (2) according to any of claims 1 to 5 for transmitting these waves.

7.- The transmission system according to claim 6, characterized in that it comprises a receiver for waves of very low frequencies comprised between 3 kHz and 30 kHz and of high frequencies comprised between 3 MHz and 30 MHz, the receiver being connected with the same wire antenna for receiving these waves.

8.- A submarine vehicle characterized in that it includes a transmission system according to any of claims 6 to 7.