

Interferometric radiometer contains two antennas, the outputs of which are connected in series to two amplifiers and two mixers, a reference heterodyne, and also contains a third and fourth antennas, the outputs of which are connected in series to the third and fourth amplifiers, the third and fourth mixers. The reference heterodyne is connected: to the second input of the first mixer through the first and second valves; to the second input of the second mixer through the third and fourth valves; to the second input of the third mixer through the first and fifth valves; to the second input of the fourth mixer through the third and sixth valves. In this case, the output of the first mixer is connected to the first input of the first adder, the output of the third mixer is connected through the first modulator and the second input of the first adder, the second input of the first modulator is combined with the output of the first pulse generator, the output of the second mixer is connected to the first input of the second adder, the output of the fourth mixer is connected to the second input of the second adder through the second modulator, the second input of the second modulator is connected to the output of the second pulse generator, and the output of the first adder is connected to the first delay line, which has a tap. At the output of the taps, the first inputs of the first and second multipliers, the first and second low-pass filters, the third and fourth multipliers, the outputs of which are combined with the third adder, the output of which is connected in series with the first device that calculates the square root, and the subtractor. Similarly, the output of the second adder is connected to the second delay line, the output of the second delay line is connected to the second input of the first multiplier and through a phase shifter at  $\pi/2$  to the second input of the second multiplier, the outputs of which are connected in series with the first and second high-pass filters, the fifth and sixth multipliers, the fourth adder and the second device that calculates the square root, the output of which is connected to the second input of the subtractor. The output of the subtractor is an output at a fixed travel difference.