Microwave Resonant Cavity Thruster

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The main part of my engine is the metal element shaped like a truncated cone. This part resembles a closed metal can and is named a resonant cavity. Inside that cavity I use an antenna to excite an electromagnetic field which consists of photons, which move inside that engine with the speed of light and from time to time they bounce off the walls. Due to this photon bouncing, inside the cavity the standing wave is created and the thrust is generated. The main task of the research is to find how that engine works. There are many various hypothesis from around the world, but none of these can be proven. The biggest curiosity is that microwave engines probably doesn't produce any apparent exhaust and therefore can broke the third law of dynamics. Traditional engines need a solid fuel and an air to work properly. Example for that is the jet engine used in airplanes or rockets. In opposite to these, microwave engine doesn't need the air. So it might be used in deep space, where there is only a vacuum. It is only needed to supply it with the electricity and it will generate the thrust. In the entire engine there's any moving part, it produces only thrust. Before I started building the engine, I ran a lot of computer simulations to check what the exact dimensions of our resonant cavity should be, and see what the distribution of electromagnetic waves inside the cavity looks like. Creating a cavity with highly accurate dimensions was key to obtaining the desired parameters. I contacted many scientists both from Poland and from across the world. This contact was very important, because these people could verify whether my calculations and derivations were correct. It is worth pointing out that only the biggest research facilities investigate microwave engines.

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