

14th April 1966

Greetings Jennie:

When Mr. Hinkley was here I discussed with him an invention called Spark Plates. They were in process of manufacture. He seemed to be interested. Recently I got them operating. They are ground steel plates 35" diameter with 1/8" gap between them. Twelve kilovolts are applied in series with one hundred megohms. This voltage is inadequate to cause an electrical discharge between the plates. However when a cosmic ray particle goes thru the plates a burst of ions are formed. This allows a spark to jump between the plates. The large resistance causes voltage between plates to drop and spark goes out. The whole phenomenon is over in a very small fraction of a second. The cosmic ray particles come singly, in pairs, and small groups spread over an area perhaps three inches diameter. In the dark the performance is quite spectacular as one gets the impression of actually seeing cosmic rays. The sparks are very bright. This device is quite insensitive to low energy particles and radiations. I'm in process of getting some quantitative data which will be forwarded to Mr. Hinkley in due time.

In view of the vastly superior performance of the above device compared to anything possible using Geiger Tubes, please cancel my request of 4/4/66 for ethyl formate. If you have it in process, just keep the bottle in N.Y.C.

Best regards,

Grote Reber
Grote Reber