



PATENTS AND DESIGNS ACTS, 1907 TO ¹⁹³⁸ ~~1932~~.

I, the undersigned, being an officer authorised by the Board of Trade under Section 62 (3) of the Patents and Designs Acts, 1907 to ¹⁹³⁸ ~~1932~~, hereby certify that the annexed is a true copy of the provisional specification as lodged on the 3rd December, 1935, in connection with Szilard's application for Patent, No. 33,540 of 1935, filed on the 3rd December, 1935.

I also certify that the date 4th July, 1934, was accorded to the said application on the ground that the invention contained therein was included in the specification lodged on that date in connection with application No. 19,721 of 1934.



WITNESS my hand this ^{9th} day of August, 1938.

W. G. Brewster

THE PATENT OFFICE,
25, SOUTHAMPTON BUILDING
LONDON, W.C.2.
ENGLAND.

19721³⁴ PROVISIONAL SPECIFICATION

35
10
L 1934
IMPROVEMENTS IN OR RELATING TO THE TRANSMUTATION OF CHEMICAL ELEMENTS.

I LEO SZILARD Citizen of Germany and Subject of Hungary
C/o Claremont Haynes & Co., of Vernon House, Bloomsbury
Square, London, W.C. 1. do hereby declare the nature of
this invention to be as follows:

The invention relates to a process and to apparatus
adapted for the generation of radio-active bodies by means
of neutrons.

In accordance with the present invention neutrons are
generated through the action of X rays on matter or through
the direct action of fast cathode rays on matter.

Neutrons are liberated from some elements, for instance
Beryllium, if they are exposed in an electric discharge to
the action of electrons. For instance if we expose them
to the action of cathode rays of a couple of million volts
neutrons are liberated from Beryllium.

Instead of exposing the substance which I wish to
transmute to the direct action of the electron I shall in
some cases expose it with advantage to the action of the X
rays which are generated if electrons travel through matter
especially through heavy elements like Bi, Pb, Hg, Th,
U etc.

Dated the

4th

day of

July

1934⁴

Claremont Haynes & Co.

Vernon House, Bloomsbury Square, W.C.

Applicants Solicitors



33.540³⁵

2:11