

1155 East 57th Street
Chicago 37, Illinois
March 22, 1949.

Mr. George Meier
C/o Trubenised Limited
17/18 Old Bond Street
London W.1, England.

Dear Mr. Meier:

This letter authorizes you to act on
my behalf in all matters concerning the British
Patent No. 440,023, and the British Secret Patent
No. 19157/34.

Very truly yours,

Leo Szilard

C

BY THIS POWER OF ATTORNEY, I,
PROFESSOR LEO SZILARD of 1155, East Fifty-seventh Street,
Chicago 57, Illinois, United States of America, appoint George
Meier of Bourne Lodge, Bourne End, Hemel Hempstead in the
County of Hertfordshire MY ATTORNEY for me and in my name to
do and execute all or any of the following acts, deeds and
things, that is to say

1. To prepare or cause to be prepared applications under Section 18 of the Patents and Designs Act 1907 - 1946 for the prolongation of British Letters Patent No. 440023 and British Secret Letters Patent No. 19157/34 and to file or cause the same to be filed at the Patent Office and to make alterations and amendments to the said Letters Patent and to execute and do all such documents, acts and things as may be necessary in connection therewith
2. To pay all monies incidental to any application made or act or thing done or document executed in accordance with paragraph 1 hereof
3. To receive any Letters Patent or other document of title in connection with the applications referred to in paragraph 1 hereof and generally to do all acts and things for obtaining such prolongations as I myself could have done if making the applications in person
4. To confer transact and make agreements with the Ministry of Supply and the Admiralty and any other Government Department and any firm of Patent Agents or Solicitors in all matters relating to the said Letters Patent and to execute and do all such documents, acts and things as may be necessary in connection therewith
5. This Power of Attorney shall be irrevocable for a period not exceeding twelve months.
6. I hereby agree to ratify all that the said George Meier shall lawfully do or cause to be done hereunder and I hereby promise to indemnify the said George Meier against all charges, expenses and losses which he may incur by reason of any acts or things done in the due execution of the powers hereby conferred on him.

SIGNED, SEALED and DELIVERED by)
the above named LEO SZILARD in)
the presence of:-)

1)
.....

2)
.....

1155 East 57th Street
Chicago, 37, Illinois.
March 22, 1949.

Mr. George Meier
Trubensised Limited
17/18 Old Bond Street
London W.1, England.

Dear Meier,

Ben Liebowitz suggested that I contact you in connection with the following matter.

In 1934 I applied for a British patent which has been granted under the number 440,023. This patent expires on the 12th of March 1950 unless its life is prolonged, and I shall come back later to this point.

Taking this patent on its face value, its first claim covers much of the atomic energy worked carried on at present by the British Government, and I would like to have your help and cooperation in determining whether the British Government would not like to acquire this patent in one form or another.

I am anxious that any approach to the British Government be made in the proper spirit since by its very nature this is not a commercial proposition in the ordinary sense, and matters of international courtesy should be allowed to take precedence over business considerations. This certainly holds for me, and I assume it may also hold for whoever may deal with this matter on behalf of the British Government. I realize, of course, that the British Government might prefer not to make any payments that are convertible into dollars, and we ought to keep this in mind from the start.

Another matter closely related with the above is the following. In 1935 or 1936 I assigned to the British Government/^{a patent} that covers broadly the nuclear chain reaction which is used in atomic energy work. This patent has been sealed secret and carries the number 19157-34. Because the only purpose in assigning this patent at that time to the British Government was my desire to keep its contents secret and because there was no payment involved, I assume that the Admiralty will return this patent to me at my request now that there is no longer any reason for keeping it secret. If the patent is now thus returned to me you could then ask the government whether they would wish to take it over for what they may consider fair compensation. Upon further inquiries you might, however, find that what I have outlined here is an unnecessarily complicated procedure, and that some shortcut could be devised.

I should like to put the matter of these two patents into your hands with the request that you explore the situation. If you feel you can handle it, would you then get two copies of the British patent and attach them to the enclosed letter addressed to Sir John Cockroft; and also mail the enclosed

2.

letter addressed to the Director of Navy Contracts.

The solicitors handling the patent No. 440,023 up to the present are:

Claremont, Haynes & Co.
Vernon House
Sicilian Avenue
Bloomsbury Square
London W.C.1

and you might get in touch with them with respect to the prolongation of the patent. Ben will write you more about this point, and his letter should arrive in the same mail.

I expect to be in London for two weeks in the second half of June and if there is a favorable response by the British Government to your approach, I would very much like to bring the discussions to a final conclusion at that time.

With kindest regards,

Yours sincerely

Leo Szilard

C

Trubenised Ltd

By Air Mail

DIRECTORS: B. LIEBOVITZ (U.S.A.) · ~~TRUBENIZING PROCESS CORP.~~ · F. M. CAPORN · T. L. HORABIN · ~~S. RACHMILEWITSCH (BRITISH, LATVIAN ORIGIN)~~
· G. MEIER ·

SEVENTEEN AND EIGHTEEN · OLD BOND STREET · LONDON · W·1

TEL: REGENT 4151 (4 Lines) · TELEGRAMS: TRUBENIS PICCY LONDON · CABLES: TRUBENIS LONDON · CODES: BENTLEY'S & UNITED TELEGRAPH

YOUR REF:

OUR REF:

GM/MK/27

DATE

28th March, 1949.

Leo Szilard, Esq.,
1155 East 57th Street,
Chicago 37,
Illinois.

Dear Szilard,

I thank you for your letter of the 22nd March with enclosures.

I shall certainly be glad to assist you.

Unfortunately, your letter arrived just as I am leaving for the continent for about three weeks so that you will not hear from me until after Easter.

In the meantime, however, we are obtaining the British Patent specifications and we are posting the letters to Sir John Cockcroft and the Admiralty. I am also having certain preliminary enquiries made as to the legal situation.

I shall write you again on my return.

Yours sincerely,

G. Meier

George Meier

Dictated by Mr. Meier and signed in his absence.

1155 East 57th Street
Chicago 37, Illinois
April 11, 1949

Mr. George Meier
Trubenized Limited
17/18 Old Bond Street
London W.1, England

Dear Meier:

I have a letter from Cockcroft dated the 5th of April, in which he acknowledges the receipt of my letter of the 22nd of March, and says that he will pass the letter on to Mr. M. W. Perrin, of the Ministry of Supply, who is responsible for patent matters. I suggest therefore that you address yourself directly to Mr. Perrin. I believe that you will find that Mr. Perrin knows me, that is, if I am not mistaken as to his identity.

At this time I also wish to acknowledge the receipt of a letter from Mr. R. P. May dated April 6, 1949.

Yours sincerely,



Leo Szilard

(GT. BRITAIN)
Trubenised Ltd

By Air Mail

DIRECTORS: B. LIEBOVITZ (U.S.A.) · ~~XXXXXXXXXXXXXXXXXXXX~~ · F. M. CAPORN · T. L. HORABIN · ~~XXXXXXXXXXXXXXXXXXXX~~
· G. MEIER ·

SEVENTEEN AND EIGHTEEN · OLD BOND STREET · LONDON · W.1

TEL: REGENT 4151 (4 Lines) · TELEGRAMS: TRUBENIS PICCY LONDON · CABLES: TRUBENIS LONDON · CODES: BENTLEY'S & UNITED TELEGRAPH

YOUR REF:

OUR REF: GM/MK/P

DATE

26th April, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 57,
Illinois,
U.S.A.

Dear Szilard,

I thank you for your letter of the 11th April. I can now give you a preliminary report on the situation.

Sir John Cockcroft, as you know, passed on your letter to Mr. M.W. Perrin of the Ministry of Supply and notified us to this effect. The Atomic Energy Research Establishment is part of the Ministry of Supply and all their patent questions are dealt with through the usual Ministry of Supply channels (the Ministry of Supply, Patents Branch, deals with all compensation and patent matters of all Government Departments, other than the Admiralty. The Admiralty deal with most of their cases themselves).

I arranged an appointment with two officials of the Ministry of Supply, Compensation Branch, with whom I negotiated previously a satisfactory payment to Ben for the wartime use of his invention. This meeting was also attended by Mr. Griffith of Mr. Perrin's Department. Mr. Griffith will be dealing with your two patents.

I shall deal with patent No. 440,023 first. According to Mr. Griffith the Department has, of course, been aware of this patent, but they are now investigating it. It seems that the work carried on at Harwell infringes claim one of your patent. They are not interested in the remaining claims. According to Mr. Griffith, he has grave doubts as to the validity of claim one. He states that the claim is extremely wide and that prior to the date of application, a considerable amount of work along these lines was being done in France and he thinks that he will find prior publications anticipating claim one.

All opinions expressed by the three officials during the interview are, of course, strictly "off the record". They have not had sufficient time to go into the matter thoroughly and all views expressed are their personal opinions for what they are worth.

/Mr.

Mr. Griffith has agreed to speed up his search and he hopes to let us have a full report in about a month's time. This will be quite convenient as we will have it by the time you come to England. Obviously, this field is so specialised that any technical arguments as to the validity of the patent will have to be dealt with mainly by yourself.

No doubt, you are fully familiar with all the published work in this field and I should be very glad to hear from you whether, in your opinion, there is any printed work which anticipates your claim one, particularly whether to your knowledge there is any work published in France. If claim one is too wide, one might have to amend it.

Assuming for the moment that claim one is valid and that Harwell makes use of it, the Ministry of Supply would compensate you. I do not think they normally buy patents, but their usual method is to pay an adequate royalty.

In the Atomic Energy field, so far as I know, no claims by any outside inventors have, so far, been presented and inasmuch as there is special legislation, namely, the Atomic Energy Act, which is of quite recent origin, it is difficult to say exactly how the Ministry will react.

Up till now, the production of isotopes has been on a very small scale and any royalties payable would not amount to very large sums, but I take it that there is a possibility that production will increase substantially and if the patent is prolonged, the claims will become substantial as time goes on.

If one cannot settle the terms of compensation with the Ministry of Supply in an amicable way, one has the right to appeal to the Court, but I do not think this contingency will arise.

We must now wait for the result of the Ministry's investigation. The case is being examined in the right quarters and I shall let you know as soon as I have further news.

As regards an application for a prolongation of patent 440,023, we are in good time, because the application need not be filed until September, 1949. Broadly speaking, there are two ways of obtaining a prolongation in this country. One can either claim that the war interfered with the opportunities of the inventor to exploit his invention fully or one can claim that, owing to special circumstances, the normal life of a patent does not give the inventor sufficient opportunity to reap the reward to which he is entitled. The latter type of claim is, of course, extremely rare and can only be pursued successfully in the case of exceptionally meritorious patents in fields where either by reason of the large capital investment required or because of the special structure of

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the industry concerned, most of the life of the patent had gone before any attempt could be made to exploit it.

I think your patent may well fall into this second category and I shall investigate the general procedure one has to adopt, the cost of the application, etc. and will write you later. If it is possible to claim under the second alternative, one should do so because, generally speaking, the period of prolongation, if prolongation is granted, is very much in excess of what one can obtain if one claims on the basis of wartime difficulties.

With regard to the secret patent No. 19157/34, Mr. Griffith is looking into this as well. According to his personal opinion the Ministry would not object to a waiver of the secrecy by the Admiralty. The Admiralty would be guided by the Ministry of Supply.

Mr. Griffith thinks, however, that they will have to ask the American Authorities first of all to see whether they would have any objection and I understand that this enquiry is being put in motion.

Provided the Ministry of Supply are agreeable, it will then be a matter of negotiation with the Admiralty to obtain a re-assignment of the patent and in this connection it would be interesting to know whether you have a copy of the assignment document drawn up at the time. Sometimes these assignments provide for re-assignment to the inventor.

If the patent is re-assigned, renewal fees will become payable but not for the period during which the patent was in the hands of the Admiralty.

According to Mr. Griffith, Harwell does not make use of the invention claimed in the secret patent, but in view of the broad outline of its scope contained in your letter to me of the 22nd March, I think this is rather surprising.

I am looking forward to hearing from you and am,

Yours sincerely,

George M. ...

The University of Chicago

CHICAGO 37, ILLINOIS

Institute of Radiobiology and Biophysics

1155 East 57th Street
Chicago 37, Illinois, U.S.A.
May 6, 1949

Mr. George Meier
Trubenized Ltd.
17 and 18 Old Bond Street
London W1, England

Dear Meier:

Thank you for your letter of April 26th.

Number 1. To your question concerning any printed work which anticipates my claim one, I only know of one such item, which is as follows:

Thug
~~This~~ is an article published in Nature, Vol. 133, page 202, 1934, by F. Joliot and I. Curie, the last paragraph of which reads as follows: "these elements and similar ones may possibly be formed in different nuclear reactions with other bombardic particles; protons, deuterons, neutrons. For example, N^{13} could perhaps be formed by the capture of a deuteron in C^{12} followed by the emission of a neutron" (underlining by me, Szilard). There are two remarks which I wish to make in connection with this passage, but I do not know to what extent these remarks are relevant, since this involves British patent law, both theory and practise. The first remark is this: The word "possibly" which I have underlined indicates that no definite statement that radioactive elements can in fact be produced by neutrons has been made by Joliot in the Nature article. My second remark relates to the meaning of the passage "these elements and similar ones." To a physicist it is quite clear what Joliot meant by "similar ones," i.e., he meant radioactive elements which arise from a stable element, if a charged particle like, for instance, an alpha particle, enters and a neutron is emitted or, conversely, if a neutron enters and a charged particle is emitted. This was the only type of process to which Joliot's remark that it may possibly take place when stable elements are

The University of Chicago

CHICAGO 37, ILLINOIS

Institute of Radiobiology and Biophysics

bombarded with neutrons relates, ^{i.e.} There is either a charged particle entering the nucleus or a charged particle coming out of the nucleus, and with the energies available in 1934 a process of this sort could take place only in light elements. Nothing in Joliot's article indicates that he was aware of the fact that neutrons of energies that were available in 1934 are capable of producing radioactive elements from heavy as well as light ones. The fact is that neutrons do produce radioactive elements from heavy elements, but not by means of the process described by Joliot, and Joliot's phrase "similar ones" does not apply to them.

Now if it should be held that the last paragraph of Joliot's paper makes my claim one invalid, the question arises whether, under the law, we can put forward a restricted claim based on the specification of the patent. In ~~the~~ respect we would have to go back to the original (provisional) application filed in March (March 12th) 1934, since a number of publications appeared in this field after that date. In this original application, if my memory is correct, I stressed the fact that radioactive elements can be produced by neutrons from heavy elements, and specifically mentioned thorium and uranium.

I do not have a copy of the British patent application available, and I would appreciate it if you could send me a photo copy of the same, as well as, if possible, transcripts of the text as originally filed, if those are available.

On this occasion I wish to draw your attention to the fact that ~~uranium~~ plutonium, which is produced from uranium by exposing uranium to neutrons, is a radioactive element and would therefore come under claim one, and also under a claim restricted to either heavy elements in general or thorium and uranium in particular. Let me also state on this occasion that the original provisional applica-

The University of Chicago

CHICAGO 37, ILLINOIS

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Institute of Radiobiology and Biophysics

tion contained in its last sentence a specific reference to producing the neutrons by means of a chain reaction in which neutrons formed the links of the chain, but that when the application was divided (because half of the application went into a secret patent) this sentence was not carried over into the published version of the patent 440-023. *P* Now to the matter of the secret patent. I do not have a copy of this patent available to me at the present time, and therefore I cannot take a stand on the view that this patent is not used at present by the British government. If my memory does not deceive me, the claims are broad enough, but it is possible that these broad claims are not sufficiently supported by the specifications, and that what is described in the specification does not cover what may be considered as the present-day practise in setting up a chain reaction. I propose with respect to the secret patent to proceed as follows. Let the government first decide whether or not they are willing to waive secrecy. In the meantime, as soon as possible, I would like to read through the text and the claims of the secret patent, and if I come to the conclusion that the process described is not used, I would not make the request that secrecy be in fact waived, and the patent be re-assigned to me. There is only one question which I wish to raise at this time, and that is, *can* ~~could~~ we prolong the life of this patent unless the patent is re-assigned to me *by* September (both patents have the same original filing date).

As to the question of whether the Admiralty is willing, or considers itself obligated, to re-assign this patent, this could be, I think, more easily cleared up if you were to read the correspondence by which the assignment to the Admiralty was carried out. I think you will find that they don't leave

The University of Chicago

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Institute of Radiobiology and Biophysics

much doubt about this point. I should be happy to send you any formal authorization that might be required for you to obtain access to this correspondence. My own copies are dispersed in various suitcases over the U.S., so I cannot get at them very easily.

I am sending an extra copy of this letter in case you wish to communicate it to Mr. Perrin's department in its entirety. Concerning the prolongation of the patents, I shall write you on another occasion.

With best wishes,

Yours sincerely,

Le^o Szilard

1155 East 57th Street
Chicago 37, Illinois, U.S.A.
May 6, 1949

Mr. George Meier
Trubenized Ltd.
17 and 18 Old Bond Street
London W1, England

Dear Meier:

Thank you for your letter of April 26th.

Number 1. To your question concerning any printed work which anticipates my claim one, I only know of one such item, which is as follows: ^{here} ~~there~~ is an article published in Nature, Vol. 133, page 202, 1934, by F. Joliot and I. Curie, the last paragraph of which reads as follows: "these elements and similar ones may possibly be formed in different nuclear reactions with other bombardic particles; protons, deuterons, neutrons. For example, N^{13} could perhaps be formed by the capture of a deuteron in C^{12} followed by the emission of a neutron" (underlined by me, Szilard). There are two remarks which I wish to make in connection with this passage, but I do not know to what extent these remarks are relevant, since this involves British patent law, both theory and practise. The first remark is this: The word "possibly" which I have underlined indicates that no definite statement that radioactive elements can in fact be produced by neutrons has been made by Joliot in the Nature article. My second remark relates to the meaning of the passage "these elements and similar ones.": To a physicist it is quite clear what Joliot meant by "similar ones," i.e., he meant radioactive elements which arise from a stable element: if a charged particle like, for instance, an alpha particle, enters and a neutron is emitted or, conversely, if a neutron enters and a charged particle is emitted. This was the only type of process to which Joliot's remark that it may possibly take place when stable elements are

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Now if it should be held that the last paragraph of Joliot's paper makes my claim one invalid, the question arises whether, under the law, we can put forward a restricted ~~ed~~ claim based on the specification of the patent. In ~~the~~ respect we would have to go back to the original (provisional) application filed in March (March 12th) 1934, since a number of publications appeared in this field after that date. In this original application, if my memory is correct, I stressed the fact that radioactive elements can be produced by neutrons from heavy elements, and specifically mention ^{ed} thorium and uranium.

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As to the question of whether the Admiralty is willing, or considers itself obligated, to re-assign this patent, this could be, I think, ~~more~~ easily cleared up if you were to read the correspondence by which the assignment to the Admiralty was carried out. I think you will find that they don't leave

much doubt about this point. I should be happy to send you any formal authorization that might be required for you to obtain access to this correspondence. My own copies are dispersed in various suitcases over the U.S., so I cannot get at them very easily.

I am sending an extra copy of this letter in case you wish to communicate it to Mr. Perrin's department in its entirety. Concerning the prolongation of the patents, I shall write you on another occasion.

With best wishes,

Yours sincerely,

Le^o Szilard

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Trubenised Ltd

By Air Mail

DIRECTORS: B. LIEBOVITZ (U.S.A.) · ~~TRUBENISING PROCESS CO. LTD.~~ · F. M. CAPORN · T. L. HORABIN · ~~S. KACHMIR, B. WITSER, B. B. H. S. K., L. T. V. I. A. N. C. O. R. I. G. I. N. I.~~
· G. MEIER ·

SEVENTEEN AND EIGHTEEN · OLD BOND STREET · LONDON · W·1

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YOUR REF:

OUR REF:

GM/MK/P

DATE

25th May, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 57,
Illinois,
U.S.A.

Dear Szilard,

I thank you for your letter of the 6th May, which will be very helpful when the matter has to be discussed further with the Ministry of Supply.

I shall begin to press the Ministry for a report shortly as, by the end of this month, they will have had one month in which to let us have their first report.

In the meantime, I am sending you herewith a photostat copy of Patent No. 440,023 as requested by you. We will try to obtain a copy of the transcripts of the text as originally filed.

With regard to the secret patent, we will have to wait until the Admiralty has communicated with the Ministry of Supply. I am told by Claremont, Haynes that they did not handle this application. Do you happen to know what firm of Patent Agents, if any, were concerned at the time ?

I am looking into the question of prolongation of the secret patent and will write you about this later.

Yours sincerely,

G. Meier
*

Dictated by Mr. Meier and signed in his absence

Enc.

1155 East 57th Street
Chicago 37, Ill.
May 25, 1949

Mr. George Meier
Trubenised Ltd.
17-18 Old Bond Street
London W.1, England

Dear Meier:

Enclosed is a copy of a letter which I received from the Royal Naval Scientific Service, for your information and such action as you may wish to take. The way things look now, I shall probably not get to England this summer, unless something unexpected happens. It will therefore be necessary for us to reach some decision about the prolongation of the patents without having the benefit of an oral discussion. I shall write to you about this on another occasion.

Yours sincerely,

Leo Szilard

PS: Don't you think that we ought to have some kind of financial arrangement? I have written to Ben asking him to propose one, if he thinks this is the time for it.

L.S.

Enclosure

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GM/MK/P

1st June, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 37,
Illinois, U.S.A.

Dear Szilard,

I thank you for your letter of the 25th May.

The next step will be a further meeting with the Ministry of Supply and I am trying to press them to let us have their first report. I shall then write you again.

I do not think at the moment there is any need for a financial arrangement. We are not incurring any expenditure worth mentioning and the question of expenses will only come up when prolongation proceedings have to be contemplated.

Yours sincerely,

G. Meier

Copy to : Dr. B. Liebowitz, New York.

1155 East 57th Street
Chicago 37, Illinois, U.S.A.
June 3, 1949

Mr. George Meier
Trubenized, Ltd.
17 and 18 Old Bond St.
London W. 1, England

Dear Meier:

Many thanks for your letter of May 25th, which contained a photostat copy of the patent application. As far as I can see, we have a strong case ~~if~~ we are permitted to restrict, if necessary, Claim One of the British patent. The crucial passage is contained in lines 30 and 31, and lines 67-86 of the ~~first~~ ^{second} page of the Provisional Specification #7840 of March 12, 1934, and the corresponding lines in the complete specification. If it is at all legally possible to submit a restricted claim, these lines would permit us to write a claim which might run as follows.

"A method for the generation of radioactive elements characterized by a neutron radiation emitted from a space in which a nuclear transmutation process leading to the liberation of neutrons is maintained, and by the exposure of a natural element in a thickness of the order of magnitude of the mean free path of the neutron or greater to the said neutron radiation, which natural element transmutes into a radioactive element under the influence of the said neutron radiation."

Two claims with even further restrictions could be submitted, one further claim where instead of "natural element" we would say "natural heavy element," and another further claim where instead of "natural element" we

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would say "uranium or thorium." These restricted claims would be best on the lines of the specification quoted above. I would like to get your reaction to this suggestion.

I wonder whether you could send me Airmail such power of attorney blanks as I would have to sign in order to enable you to take action, if you should be unable to contact me.

There is just a slim chance that I might be able to go to London some time in the first week of July, if this appears to be justified on the basis of some favorable response which you may be able to get in the meantime from the British government. Otherwise if I stay in the U.S. I shall be traveling around, and be very difficult to reach between July 8 and the middle of September.

You ask you handled the secret patent. The secret patent arose out of the specifications which were handled by Claremont, Haynes and Co., and from which parts were divided. If Claremont, Haynes did not handle it then nobody did.

Yours sincerely,

Lh

Leo Szilard

PS: I think I wrote you before that the most important manufacture coming under the proposed restricted claim would be the manufacture of plutonium from uranium. The restricted claims which I proposed in this letter would also cover the manufacture of radioactive elements from thorium, which is all to the good. Likewise, the manufacture of polonium from bismuth would be covered by the claims as proposed in this letter since bismuth is a heavy element.

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1155 East 57th Street
Chicago 37, Illinois, U.S.A.
June 3, 1949

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Mr. George Meier
Trubenzed, Ltd.
17 and 18 Old Bond St.
London W. 1, England

Dear Meier:

Many thanks for your letter of May 25th, which contained a photostat copy of the patent application. As far as I can see, we have a strong case if we are permitted to restrict, if necessary, Claim One of the British patent. The crucial passage is contained in lines 30 and 31, and lines 67-86 of the second page of the Provisional Specification #7840 of March 12, 1934, and the corresponding lines in the complete specification. If it is at all legally possible to submit a restricted claim, these lines would permit us to write a claim which might run as follows:

"A method for the generation of radioactive elements characterized by a neutron radiation emitted from a space in which a nuclear transmutation process leading to the liberation of neutrons is maintained, and by the exposure of a natural element in a thickness of the order of magnitude of the mean free path of the neutron or greater to the said neutron radiation, which natural element transmutes into a radioactive element under the influence of the said neutron radiation".

Two claims with even further restrictions could be submitted, one further claim where instead of "natural element" we would say "natural heavy element", and another further claim where instead of "natural element" we would say "uranium or thorium". These restricted claims would rest on the lines of the specification quote d above. I would like to get your reaction to this suggestion.

I wonder whether you could send me Airmail such power-of-attorney blanks as I would have to sign in order to enable you to take action, if you should be unable to contact me.

There is just a slim chance that I might be able to go to London some time in the first week of July, if this appears to be justified on the basis of some favorable response which you may be able to get in the meantime from the British government.

Otherwise if I stay in the U.S., I shall be traveling around, and be very difficult to reach between July 8 and the middle of September.

You ask who handled the secret patent. The secret patent arose out of the specifications which were handled by Claremont, Haynes and Co., and from which parts were divided out. If Claremont, Haynes did not handle it, then nobody did.

Yours sincerely,

Leo Szilard

P.S. I think I wrote you before that the most important manufacture coming under the proposed restricted claim would be the manufacture of plutonium from uranium. The restricted claims which I proposed in this letter would also cover the manufacture of radioactive elements from thorium, which is all to the good. Likewise, the manufacture of polonium from bismuth would be covered by the claims as proposed in this letter since bismuth is a heavy element.

1155 East 57th Street
Chicago 37, Illinois, U.S.A.
June 15, 1949

Mr. George Meier
Trubenized, Ltd.
17 and 18 Old Bond Street
London W. 1, England

Dear Meier:

Since I have had no acknowledgment from you of my letter of June 3rd, I am sending you enclosed a copy of it so as to be sure it is in your hands.

I am also enclosing a copy of a letter which I received a few days ago from Mr. Perrin. At this time I also wish to acknowledge receipt of the last letter I have from you which is dated June 1st, 1949.

Please let me know if there are any further developments.

Yours sincerely,

Leo Szilard

m
Encl.

J-12

Trubenised (GT. BRITAIN) Ltd

DIRECTORS: F. M. CAPORN · T. L. HORABIN · B. LIEBOWITZ (U.S.A.) · G. MEIER

SEVENTEEN AND EIGHTEEN · OLD BOND STREET · LONDON · W·1

TEL: REGENT 4151 (4 Lines) · TELEGRAMS: TRUBENIS PICCY LONDON · CABLES: TRUBENIS LONDON · CODES: BENTLEY'S & UNITED TELEGRAPH

YOUR REF:

OUR REF:

GM/MK/P

DATE

15th June, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 57,
Illinois,
U.S.A.

Dear Szilard,

I thank you for your letter of the 3rd June.

Before we do anything further, I want to wait for the first reply of the Ministry of Supply. We had a letter of which the following is an extract :-

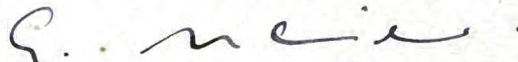
"With reference to your enquiry dated 26th May, 1949 our investigations are not yet complete, we are awaiting information from the United States.

I will let you know the position in two weeks time if we have not completed our enquiries before then."

As regards an authorisation for the amendment of the patent, I will obtain the necessary forms and will send them on to you for signature, but I do not really think this is important at the moment because whatever steps may ultimately have to be taken, will have to be taken in very close consultation with you. The whole subject is far too new and far too specialised for anybody who is not an up-to-date expert in it to start cutting about the patent.

As soon as I have the first reaction from the Ministry, I shall write you and I hope this will be before the 8th July.

Yours sincerely,



Copy to Dr. B. Liebowitz, New York Office

GM/MK/P

20th June, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 37,
Illinois, U.S.A.

Dear Szilard,

Many thanks for your letter of the 15th June. In the meantime, you will have received my letter of the same date.

I do not think anything useful can be done at the moment. It would be premature to look into the question of the possible amendment to your Patent because, on the one hand, the Ministry of Supply may not contest its validity after all and, on the other hand, if they do contest its validity they may supply us with a reasoned argument and references to the prior literature on which they rely. In the latter case, one will obviously have to consider the question of amendment in the light of the information supplied.

At the present moment, everything seems to hinge on the U.S. Authorities and I think the Ministry of Supply would be quite ready to discuss matters further with us if they had the reply from the States. I think, therefore, it may be a good idea if you contacted the U.S. Authorities to hurry them up.

In any case, we are in good time for prolongation proceedings.

Yours sincerely,

George Meier
George Meier

Dictated by Mr. Meier and signed in his absence

Copy to : Dr. Liebowitz, New York.

1155 East 57th Street
Chicago 37, Illinois
July 11, 1949

Mr. George Meier
17-18 Old Bond Street
London W 1, England

Dear Meier:

I have your letter of July 1st and am sorry to say that I cannot very ^{well} ~~much~~ accelerate action by the United States Atomic Energy Commission in this matter.

You will have in the meantime received Mr. Perrin's letter dated July 4th. Since the British Government does not accept the validity of Claim 1, the question now arises whether it is legally possible for us to restrict Claim 1 and also how the British Government would feel about the restricted claims and their validity on the basis of the passages contained in the original specification of the provisional application dated March 12, 1934. For reasons of novelty it will ~~probably~~ be necessary for us to go back to that date.

I wonder whether you could take up this question with Mr. Perrin's office before you leave for the United States. I do not plan to ~~go into~~ the East during July and August unless you obtain in the meantime from the British Government a positive reaction to the proposed restricted claims. In that case I might perhaps fly east to discuss with you the decisions that we may have to make. Ben will know how to reach me *in Colorado*

Yours sincerely,



Leo Szilard

Ref: GM/MG/27.

1st July, 1949.

Prof. L. Szilard,
Institute of Radiobiology and Biophysics,
University of Chicago,
Chicago, 37,
Illinois,
U.S.A.

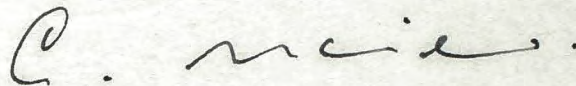
Dear Szilard,

With reference to my last letter, I should be very glad if you would let me know by return whether you can expedite the answer of the United States authorities to the British Ministry of Supply.

The reason why I would like them to reply at once is that I understand the British authorities are quite ready to talk matters over with me, but that they cannot go ahead until they have heard from the United States.

On the other hand, I shall be leaving here in the second half of July, probably about the 20th or so, for the States, and if by then we had a detailed reply from the Ministry of Supply it might pay us to meet in New York if you are anywhere near New York during July and August, so that we can discuss everything verbally. As I have written before, the whole subject is so new and complicated you will have to take a very active part in these negotiations, but in order for any discussions to be profitable we really should know the attitude of the British authorities first of all.

Yours sincerely,



George Meier.

TRUBENIZING PROCESS CORPORATION
350 FIFTH AVENUE
NEW YORK 1, N. Y.

July 29, 1949

Professor Leo Szilard
Stead Ranch & Hotel
Estes Park, Colorado

Dear Szilard:

Before leaving England I had a meeting with Mr. Perrin of the Ministry of Supply to discuss your Patent No. 440023.

I took along Mr. Drummond, our patent agent, and we discussed fully with Perrin the question of the validity of your patent and any possible amendment to it.

I am afraid the situation does not look particularly promising. The Ministry's attitude is that they have known of this patent for many years and that in their opinion it is definitely invalid particularly because the first claim is more in the nature of a statement of the problem to be solved than a claim to a specific solution and particularly because of the article in Nature which they claim anticipates your disclosure.

It also seems that it will not be possible to amend the Patent to overcome these objections. I asked Mr. Drummond to let me have a report on the possibility of amending the Patent and I am enclosing a copy of this report herewith.

It is of course possible that through our ignorance of atomic physics, we have missed some important point and I would like to hear from you as soon as possible. If Drummond's view is correct, then there will be no point in attempting to obtain a prolongation of the Patent because the only possible licensee, under the Patent, would be the British Government and if they are not interested, it is not worthwhile going through the trouble and expense of filing an application for prolongation.

Unfortunately, we were not able to discuss with Mr. Perrin the secret patent because we have no knowledge of what it contains and until the Ministry of Supply receives the necessary reply, which they are expecting from the U. S. authorities, we will not be able to do anything further. I have asked Mr. Perrin to remind the American authorities of the urgency of the matter.

Mr. Perrin will again study the Patent No. 440023 in the light of the points which we raised during our conversation and in particular he will let us know whether any amendments, which we might be allowed to make, would alter the Patent sufficiently


July 29, 1949

Professor Leo Szilard

to make it of interest to the Ministry. I must confess that at the present moment I am not very hopeful. Mr. Perrin asked me particularly to give you his regards.

I shall be in this country until the 20th of August and although there is a slight possibility that I may have to go to Chicago, this is by no means certain. If you think a meeting would be helpful, please let me know; perhaps it can be arranged.

Yours sincerely,


George Meier

GM/sz
Enc.

GM/JH/27

18th July, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 37,
Illinois,
U. S. A.

Dear Szilard,

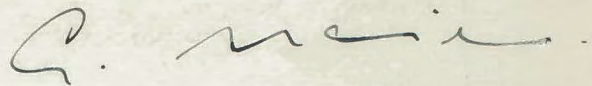
I thank you for your letter of the 11th July.

Before leaving I shall be seeing Mr. Perrin and will also discuss the question of restricting the claims with our patent agent.

The meeting with Mr. Perrin will take place on Tuesday next, 19th July, and I am leaving for the States on Thursday the 21st July. I shall probably write you from New York. It will depend on the meeting with Perrin and the views of our patent agent whether it will be worth while arranging a meeting between us while I am in the States.

I have obtained the issue of "Nature" to which reference was made in Mr. Perrin's letter and I think we now have everything together to consider what steps should be taken.

Yours sincerely,



George Meier.

Cable Address:
TRUBENIZE NEW YORK

Telephone:
Pennsylvania 6-3671

TRUBENIZING PROCESS CORPORATION
350 FIFTH AVENUE
NEW YORK 1, N. Y.

August 5, 1949

Professor Leo Szilard
Stead Ranch and Hotel
Estes Park, Colorado

Dear Szilard,

I thank you for your letter of the 31st of July.

I agree with you that unless Mr. Perrin alters his views on further examination of the various points which we raised during our interview with him, it will not be worthwhile pursuing the matter any further and we will have to let it drop.

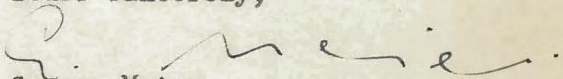
If we do not feel that we have a case under the published patent, there will be no point in applying for prolongation as I do not think it would be worthwhile incurring any expenditure.

As regards the secret patent, we will have to look into this when it has been de~~se~~-secretized, but again, the prospect does not seem to be very bright.

I am very sorry that the results have been so negative.

I am also sorry that I will not see you while I am here. If you see Abba Lerner on your return to Chicago, please give him my regards.

Yours sincerely,


George Meier

GM/sz

Cable Address:
TRUBENIZE NEW YORK

Telephone:
PEnnsylvania 6-3671

TRUBENIZING PROCESS CORPORATION
350 FIFTH AVENUE
NEW YORK 1, N. Y.

August 1, 1949

Professor Leo Szilard
Stead Ranch and Hotel
Estes Park Colorado

Dear Szilard:

With reference to my letter of July 29th, I have just received a Power of Attorney which I am enclosing herewith.

You asked me in one of your letters to get out a Power of Attorney so I could act for you in connection with any prolongation proceedings which you may want to start.

I am not so certain that it will be worthwhile filing an application for the prolongation of the two patents but in any case, I have just received the Power of Attorney from London. I am sending it on to you herewith so that you can execute it and should the need arise I can make use of it. It certainly will help to speed up matters.

You will note that your signature must be affixed in the presence of two witnesses.

Yours sincerely,



George Meier

GM/sz
Enc.

Cable Address:
TRUBENIZE NEW YORK

Telephone:
PEnnsylvania 6-3671

TRUBENIZING PROCESS CORPORATION
350 FIFTH AVENUE
NEW YORK 1, N. Y.

August 8th, 1949

Dr. Leo Szilard
Stead Ranch & Hotel
Estes Park, Colorado

Dear Dr. Szilard:

I thank you for your letter of 3rd August with its enclosures.

I am writing to Mr. May, who is the lawyer employed in our office, at once and I am requesting him to contact Drummond and Mr. Perrin.

I hope therefore that I shall have a further report on the matter before leaving here.

I am not terribly hopeful about the amendment of the patent as proposed by you being allowable, as it rather looks to me as if too much "hindsight" is being employed.

Mr. Drummond will, however, no doubt give us his views.

Yours sincerely,


G. Meier

GM/eh

Cable Address:
TRUBENIZE NEW YORK

Telephone:
PENNSYLVANIA 6-3671

TRUBENIZING PROCESS CORPORATION
350 FIFTH AVENUE
NEW YORK 1, N. Y.

August 17, 1949

Professor Leo Szilard
Stead Ranch & Hotel
Estes Park, Colorado

Dear Szilard:

I am sending you herewith copy of a letter from Mr. Drummond.

On my return to London, I shall discuss this matter further with ~~them~~^{him} but in the meantime you will no doubt also have received the letter from Mr. Perrin which he sent to you in Chicago.

In view of the opposition proceedings which the Ministry of Supply would launch, I do not think the possibility of a useful amendment is very great.

I should be glad if you would let me have your comments on Drummond's letter, ^{to London} and I shall, of course, write you again as soon as I have had an opportunity of seeing Drummond.

Yours sincerely,


George Meier

GM/sz
Enc.

By Dip. Bag

Professor Leo Szilard,
The University of Chicago,
1155, East 57th Street,
Chicago 37,
Illinois,
U.S.A.

D.At.En.
R.447.

RETURN TO
STEAD RANCH AND HOTEL
ESTES PARK, COLORADO
S2ILARD



Mr. George Meier
40 Trubensising Process Co
350 Fifth Ave
New York City



Stanley Hotel

Estes Park, Colorado

September 6, 1949

Mr. George Meier

Trubenized Ltd.

17 and 18 Old Bond Street

London W1, England

Dear Meier:

Many thanks for your letter of August 17th, enclosing copy of a letter from Mr. Drummond of August 12th. I wish to make to this matter the following further comments:

(1) It is not my intention to press any of the issues mentioned earlier or mentioned in the following unless it is possible to convince Mr. Perrins office that we have a just case.

(2) Claim 5 of the patent is of some practical importance. It is based on the provisional specifications of July 4, 1934 and September 20, 1934. It has been in fact used for research purposes by the British Government during the war, but it may be that it was used in Canada (^{where} ~~while~~ I have no patent) rather than in England. Whether or not it is now used in England I do not know.

(3) Claim 7 is based on the provisional specification of September 20, 1934 and covers what is usually called the Szilard-Chalmers Process. Whether the phrasing of the claim makes it invalid because it is functional, I do not know. However, this claim is based upon the lines 1 to 33 of the sixth page of the patent specification (which is part of the provisional specification dated September 20, 1934). If necessary, the claim could be amended using the phraseology employed in lines 12 to 17 in order to define what kind of compound is being used.

Inasmuch as the process covered by claim 7 is the only one that can be used for chemical separation when the radioactive element is an isotope of the bombarded element, it is likely that this process will be used in order to prepare certain radioactive elements carrier-free. Assuming that the life of this claim could be extended five to ten years, it might be a very valuable one. It is my guess that

it will take some time before the British Government will get around to using this process for preparing radioactive elements that are marketed.

(4) I now come back to the question of claim 1. For purposes of discussion I propose that it be amended to read "~~A~~ method for the generation of a radioactive element from a heavy element characterized by the exposure of a substance which contains at least one mol-percent of the said heavy element, in a thickness of the order of magnitude of the mean-free path, to neutrons which are not sufficiently energetic to produce in substantial amounts n - p or n - α reactions in the said heavy element.

My contention is: A. that the above claim can be supported on the base of the specification dated March 12, 1934. B. that it does not cover what Joliot may have predicted. C. that it is not functional. D. that it is not inoperative (because every heavy element does in fact transmute after absorbing one or more neutrons into a radioactive element).

I wish to draw your attention in connection with my contention cited under B to a passage contained in the provisional specification of September 20, 1934, (see lines 9 to 43,) in which the opinion prevailing at that time is voiced to the effect that the processes envisaged by Joliot do not take place if the neutrons are slow and the bombarded elements are heavy. Inasmuch as the date of this provisional specification is September 1934, we cannot use this passage to sustain the amended claim 1 which is here proposed, but the views expressed in this passage were common to those versed in the art and were held also at the time when Joliot's paper appeared and the provisional specification dated March 12, 1934 was filed.

I should perhaps also add ^{here} for the sake of greater clarity, that the radioactive elements produced by neutrons by the processes envisaged by Joliot are chemically different from the bombarded elements whereas the radioactive elements produced by slow neutrons from heavy elements are chemically isotopic with the bombarded elements.

This is I believe as much as I can add to my previous letters. It is not clear to me whether or not it is possible to ask for an extension of the life of a patent on the ground that the secrecy which has been imposed upon this field between 1939 and 1946 impeded the exploitation of the patent.

I wonder whether you could communicate to Mr. Perrin my arguments and explain to him why I think that the patent contains valid inventions. Would you please also explain to him that I am away from my office on an extended vacation, otherwise I would have answered his letter before this time. I shall write him when I get back to Chicago.

In further communications, please use again my Chicago address.

With best wishes,

Sincerely yours,

COPY

A.A. THORNTON & CO.
Chartered Patent Agents

Napier House,
24/27 High Holborn,
LONDON, W.C.1.

6th September, 1949.

G. Meier, Esq.,
Trubenisied (Gt. Britain) Ltd.,
17/18 Old Bond Street,
LONDON, W.1.

Dear Mr. Meier,

Professor Szilard

Confirming our recent conversation, I have given considerable further thought to this matter since I wrote to you on 12th August, but have been quite unable to find any line of thought which would make me feel more optimistic about our chances in the matter. The arguments advanced by Professor Szilard are extremely ingenious but his approach to the matter does not fit in with the patent law of this country as I understand it, and I cannot believe that Professor Szilard's arguments would find any acceptance in our Courts. I regret to say that the more I think about the matter the more I find myself agreeing with the attitude of Mr. Perrin and his advisers as set out in the letters of 4th July and 5th August. I really do not believe that it is worth while spending any more time or money over this matter and I think that Professor Szilard would really be well advised to forget all about it.

Yours faithfully,

(Sgd) A.A. THORNTON & CO.

GM/MK/P

7th September, 1949.

Professor Leo Szilard,
1155 East 57th Street,
CHICAGO 37,
Illinois, U.S.A.

Dear Szilard,

With reference to Mr. Drummond's letter dated 20th July, a copy of which I sent you from New York, I have now discussed the matter with him again and the conclusion which we have come to is that there is really no prospect of any useful amendment being obtained.

I am enclosing herewith a copy of a letter from Mr. Drummond dated 6th September setting out his views.

The difficulty lies in the basic concept of Patent Law which grants an inventor a monopoly limited to 16 years for a very specific disclosure describing an improved method of manufacturing or a chemical process, etc.

In the circumstances, I do not think it would be worth while filing an application for prolongation of Patent No. 440023, but should you wish to proceed all the same, please let me know so that I can take the necessary steps.

What procedure are we to follow with regard to the Secret Patent ? Do you wish to have this re-assigned to yourself ?

Yours sincerely,



George Meier

Enc.

Ref: GM/MC/P

15th September 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 37,
Illinois,
U.S.A.

Dear Szilard,

I thank you for your letter of the 6th September.

I shall pass this on to Mr. Perrin and will report further
in due course.

As you know, the ~~official date~~^{form} for filing an application for the
prolongation of your two patents should be lodged this month, if it
is to be lodged at all.

I have ascertained, however, from Mr. Drummond that we are not
losing any rights by delaying the filing of the application for a
month or so and, while the Patent Office does not like such
applications being filed out of time, they will accept them if the
circumstances are explained fully.

I wonder whether you have heard anything further from the
Admiralty about the secret patent. Until this has been
desecretized it is not possible to judge its merits but, on the
other hand, I do not know whether you want it desecretized as fees
will then start to be payable.

As soon as I have further news from Mr. Perrin I shall let
you know.

Yours sincerely,



G. Meier.

To file

GM/MK/P

29th September, 1949.

Professor Leo Szilard,
1155 East 57th Street,
Chicago 37,
Illinois, U.S.A.

Dear Szilard,

With further reference to your letter of the 6th September, I have not yet heard from Mr. Perrin, but for what it is worth, I am sending you enclosed a copy of a letter dated 16th September from Mr. Drummond setting out his comments on the remarks contained in your letter of the 6th September.

As you will see, Mr. Drummond is still extremely doubtful about the possibility of obtaining a useful amendment and I also think, as I have said in earlier correspondence, that the possibility of obtaining a really satisfactory amendment under existing British Law is very remote.

I do not agree with Drummond that we would have much difficulty in obtaining a prolongation of the patent, but whether the effort of obtaining a prolongation and fighting for an amendment and subsequently claiming infringement by the Ministry of Supply would be worth while, I do not know.

In the meantime, I shall press Mr. Perrin to let us have his observations on your letter dated 6th September in the near future and will then, of course, pass these on to you.

I am looking forward to hearing from you with regard to the secret patent.

Yours sincerely,

George Meier

Enc.

(17)

A.A. Thornton & Co.,

Napier House,
24-27 High Holborn,
London, W. C. 1

GM/MC/P.
PD/JT

16th September, 1949.

G. Meier, Esq.,
Messrs. Trubenised (Gt. Britain) Ltd.,
17/18 Old Bond Street,
London, E. 1.

Dear Mr. Meier,

Re: Szilard.

In reply to your letter of the 12th September, I am afraid that I too am very much out of my depth in this field and my trying to advise you is rather a case of the blind leading the blind. In view of this and the first paragraph of Professor Szilard's letter of the 6th September, I think that your idea of passing that letter on to Mr. Perrin to get his reactions is thoroughly sound.

I, of course, have no way of telling whether claim 5 of the patent has been used in this country and it may be that you will get this information from Mr. Perrin if you send him Szilard's letter. Whether the claim is valid involves us in a whole new set of difficult questions. Even if the method of producing neutrons which is defined in claim 5 does contain patentable subject matter, it does not necessarily follow that the claim is valid. The claim is still directed to a method of producing radio-active elements, as defined in claim 1, limited to the use of a particular source of neutrons. If claim 1 is bad for the reasons discussed in the earlier correspondence, I fear that claim 5 may automatically be bad also. Certainly it could be argued that the claim was bad in this way, quite apart from any question of its own merits. Possibly Mr. Perrin and his advisors may take a less legalistic view of the matter and certainly there is no point in putting ideas on the subject into his head.

The same point also arises on claim 7. As to the functional form of that claim, which raises doubt in the mind of Professor Szilard, I think that the claim must be read as referring to a compound chosen as having the properties defined in the complete specification in the passage beginning on page 9, line 124 (this passage corresponding exactly to the passage in the provisional specification on page 6, line 12, to which Szilard refers) but, in any event, as Szilard pointed out, the claim can certainly be amended to specifically refer to compounds having these properties.

Since the process has not yet been used on a commercial scale, the claim would not be of any value if we were to obtain a prolongation of the term of the patent.

The latest suggestion for the amendment of claim 1 and the arguments advanced in support of the amended claim certainly confirm my impression of Professor Szilard's ingenuity. I regret to say that I am extremely doubtful whether the amendment would be allowed. I feel fairly certain that it would be refused under the present Patent Act, which, as you know, says that an amended specification must not claim an invention "substantially different from that claimed in the specification as it stood before amendment" and these words have been read by the Courts in a very restrictive way. Under the new Patents Act, which comes into force in January, 1950, we would certainly stand a better chance, since the corresponding passage in the Act provides that the amended specification must not claim "matter not in substance disclosed in the specification before amendment." How liberally this new wording will be interpreted, I obviously cannot say, but a very liberal interpretation would be necessary to let us secure the claim Professor Szilard suggests.

With regard to the prolongation, I feel no doubt whatever that the secrecy regulations would be regarded as having been imposed by reason of hostilities and would be considered as relevant on an application for extension under Section 18(6) or 18(8), the war losses sections of the Act. However, secrecy was not the only effect which the war had on developments in this field. I can foresee the possibility of argument that, far from the war having impeded the exploitation of the invention, the vast amount of work done in this field by reason of the war brought the exploitation of the invention very much further forward than would have been the case if there had been no war.

I am sorry to be such a wet blanket in this matter, but there is no doubt that we are up against a really tough situation. You do not need to be told that a claim for patent infringement is always a difficult and expensive matter. In this case it seems to be agreed that the patent is invalid as it stands and the normal term of the patent has almost expired. Consequently, before we can even start to cope with the usual troubles, we would have to force through a very difficult and contentious amendment and succeed on a doubtful application for the prolongation of the patent. A great deal of time and money will have to be spent if we are to get anywhere at all in this matter, and it would be a brave man who attempted to forecast how much of either would be needed.

Yours faithfully,

(Sgd) P. Drummond

GM/MK/P

9th November, 1949.

Professor Leo Szilard,
1155 East 57th Street,
CHICAGO 37,
Illinois, U.S.A.

BY AIR MAIL

Dear Szilard,

We have now received a letter from Mr. Perrin as per copy enclosed.

I also understand that the Admiralty have re-assigned your secret patent to you and I am enclosing a copy of a letter from Mr. Drummond dated 3rd November.

Yours sincerely,

A handwritten signature in dark ink, appearing to read 'G. Meier', written in a cursive style.

George Meier

Encs.

to File

16

17-18 · OLD BOND STREET · LONDON · W · 1 · TEL · REGENT 4151

GM/MK/P

16th February, 1950.

Professor L. Szilard,
1155 East 57th Street,
Chicago 37,
Illinois,
U.S.A.

Dear Szilard,

I have now received a further communication from Mr. Perrin and I am enclosing a copy herewith.

I am looking forward to hearing from you whether you wish anything further to be done in connection with the two Patents.

Yours sincerely,

C. Meier

Enc.

(17)