

PODBIELNIAK, INC.

341 EAST OHIO STREET

Telephone SUperior 7-7825 to 7-7830

CHICAGO 11, ILLINOIS

April 1, 1949

University of Chicago
6200 Drexel Avenue
Chicago 37, Illinois

Attention: Mr. L. E. Packard

Gentlemen:

In reply to your request, we are pleased to forward copies of our current literature on centrifugal solvent extractors.

In addition to the #6100 and #6080 units, we now have additional equipment designated as #6500, #7000 and #7500. Literature on these new units has not, as yet, been completed for distribution.

However, the #6500 is a unit somewhat larger than the #6100, with a combined stream capacity of 250 G.P.H. based on the system butylamine - A.P.C.O. #125 (dewaxed and treated kerosene fraction) - water.

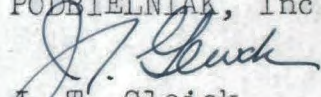
Model #7000 is rated at 1000 GPH (combined streams) and the #7500 at 1500 or more G.P.H., with both units testing 10 theoretical stages on our standard ternary test system.

Dr. Podbielniak or Mr. H. R. Kaiser of our office will be glad to discuss the specific problems involved with your staff and also to point out that we have pilot plant facilities available for the investigation of problems involving the ordinary type of chemical materials and solvents.

Any additional technical information and data required will be gladly furnished upon request. Thank you for your interest, and for the opportunity of writing to you in this instance.

Very truly yours,

PODBIELNIAK, Inc.


J. T. Gleick

Proposal ~~6080~~ 6100
Sci-en-tec Reprint

JTG:pw
Enc: Bulletin 30 (Domestic)
(2) Extractor Reprints

NDA

(C-8)

June 12, 1950

For Podbielniak, Inc.:

We have today received from Nuclear Development Associates, Inc. confidential disclosure of centrifugal liquid-liquid phase separating machine, an invention by Dr. Leo Szilard, Chicago, Illinois, including four drawings by L. E. Packard, dated:

4/30/49
5/8/49
5/13/49
5/25/49

and including modification (not shown in drawings) wherein mixer shaft remains stationary, eliminating need for one set of bearings.

Disclosure accepted in confidence by Podbielniak, Inc.

Signed for PODBIELNIAK, INC.

by Walter J. Podbielniak
Walter J. Podbielniak

June 14th 1950

disclosed on June 24th 1950
Leo Szilard

C O P Y

Cable Address
Podbielniak

PODBIELNIAK, INC.
341 East Ohio Street
Telephone Superior 7-7825-7830
Chicago 11, Ill.

Good letter

June 13, 1950

Dr. John R. Menke
Nuclear Development Associates, Inc.
33 West 60th Street
New York 23, N. Y.

Dear Dr. Menke:

I have your letter of June 9th regarding a development of Dr. Leo Szilard, in which you think we may be interested. I will be happy to talk to Dr. Szilard on the subject, if you advise me what specific assurance you require regarding confidential treatment and if you authorize Dr. Szilard to explain your project to me and my staff. I will, of course, keep your disclosures confidential, insofar as they represent new information not already possessed or reaching me or available from other sources, such as publications or patents, our files, etc.

I believe the usual and best way is for you or Dr. Szilard to write me a letter in duplicate, disclosing in abstract the subject of your disclosure, and asking me to acknowledge, by counter-signing and giving you a copy, that I have visited you on the specific date and at the specific place, for the purpose of discussing the stated subject, and that I will promise to keep same confidential, except as reserved above.

Sincerely,

(Signed)

Walter J. Podbielniak
President

WJP:gg

This is a reasonable reservation but can be put to unscrupulous use. You will need to judge on the spot. We have gotten acceptance without this reservation from Pfizer but not from Solvay.

PODBIELNIAK, INC.

341 EAST OHIO STREET
Telephone SUperior 7-7825 7-7830
CHICAGO 11, ILL.

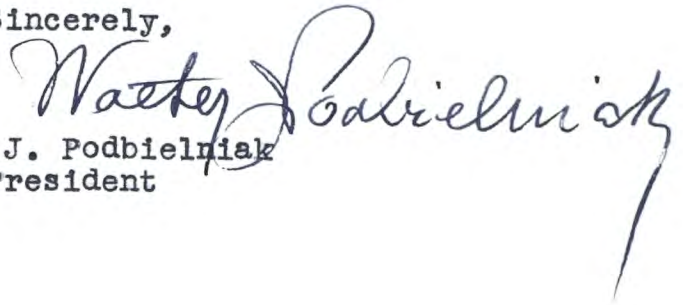
June 15, 1950

Dr. Leo Szilard
c/o Quadrangle Club
1155 East 57th Street
Chicago 37, Illinois

Dear Dr. Szilard:

I enclose signed copy of promise of confidential treatment form, per letter to me, June 12th, from your Mr. John R. Menke.

Sincerely,


Walter J. Podbielniak
President

WJP:gg

Encl. Signed form

cc: Dr. John R. Menke
Nuclear Development Associates, Inc.
33 West 60th Street
New York 23, N. Y.

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1155 East 57th Street
Chicago 37, Illinois
June 28, 1950

Dr. Walter J. Podbielniak
Podbielnick, Inc.
341 E. Ohio Street
Chicago 11, Illinois

Dear Dr. Podbielniak:

I understand from Mr. Menke that you had suggested that I give you a ~~general~~ description of the invention that we are going to discuss in general terms.

The invention concerns liquid liquid extraction and an apparatus adapted to carry out liquid liquid extraction. Described in general terms, the invention is as follows:

There is a rotating drum or tube and two liquid phases are pressed by the centrifugal force against the inner surface of that tube. The two liquid phases are kept in a counter current flow in the axial direction within the said rotating tube.

In one embodiment, which I propose to discuss with you in greater detail, the tube is divided axially into a number of chambers. In a number of these chambers, the two liquids separate under the action of the centrifugal force, whereas in a number of chambers lying in between the above mentioned chambers, the two liquids are stirred to increase the transfer of the solvent from one liquid phase to the other liquid phase.

I trust that this is the type of general description of the invention which you desired me to give you.

Very truly yours,

Leo Szilard

24 June 1950

Dr. Walter J. Podbielniak
Podbielniak, Inc.
341 East Ohio Street
Chicago 11, Illinois

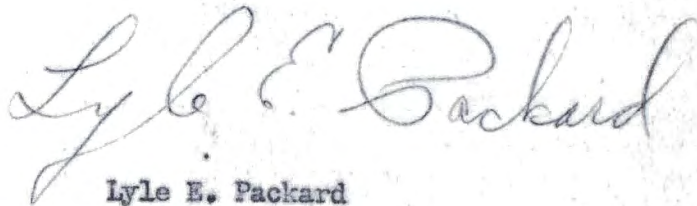
Dear Dr. Podbielniak:

At the request of Dr. Szilard, I am sending you the following material enclosed herewith:

Drawing dated 5-8-49, revised 5-23-50, issue stamp 5-24-50
Drawing dated 5-13-49, revised 5-23-50, issue stamp 5-24-50
Description "Method of Assembly" issue stamp 5-24-50

This material all pertains to the double rotor, stationary shaft version of Dr. Szilard's proposed Liquid-Liquid Extractor.

Very truly yours,


Lyle E. Packard

cc Dr. Leo Szilard ✓

PODBIELNIAK, INC.

341 EAST OHIO STREET

Telephone SUperior 7-7825 7-7830

CHICAGO 11, ILL.

June 26, 1950

Dr. Leo Szilard,
c/o Quadrangle Club,
1155 East 57th Street,
Chicago 37, Illinois.

Dear Dr. Szilard:

It was a pleasure to meet you and Mr. Packard at breakfast last Saturday to discuss your development in centrifugal high stage solvent extraction.

Confirming the references I gave you in conversation, please see article on "Commercial Extraction Equipment" by Morello and Poffenberger, in the current June issue of Industrial and Engineering Chemistry. I particularly direct your attention to Fig. 23 and pertinent patent on the Maycock rotating casing and stationary inner cylinder construction. I also suggest you check W.J.D. Van Dijck's Dutch Patent Octrooi No. 64170 on a structure similar to yours, also another patent of his, Dutch 49,301, which I cannot immediately locate in my files, on similar subject. Van Dijck has gone into very extensive disclosures of many embodiments of rotating external cylinders vs stationary or differential speed inner cylinders, vanes, discs, etc. There may be other patents on this general construction, for all I know, as we have not conducted an exhaustive patent search in this specific direction.

Inasmuch as you have not built and tested any models, your contribution would seem to reside in the idea itself. Under such circumstances, aside from the merits of the idea, which can be developed only by construction and testing of many models, an expensive procedure, (as we know) we could conceivably

be interested only if you could obtain strong protective patent or patents. The first thing to do, I would suggest to you and Mr. Menke, to whom I am sending copy of this letter, is for your patent counsel to investigate fully the above references as well as others, which may be pertinent, appraise your position in this respect and advise me.

Sincerely,

Walter Podbielniak

Walter J. Podbielniak

WJP/BF

cc: Mr. John R. Menke
Nuclear Development Associates, Inc.
33 West 60th Street
New York 23, N. Y.

P.S. Reed dug in mail & your letter. Thank you.

*file logged - logged
extracted*

CABLE ADDRESS
PODBIELNIAK

PODBIELNIAK, INC.

341 EAST OHIO STREET
Telephone SUperior 7-7825 7-7830
CHICAGO 11, ILL.

August 1, 1950



Visit our Booth 65-66

Dr. Leo Szilard,
c/o Quadrangle Club
1155 East 57th Street
Chicago 37, Illinois

Dear Dr. Szilard:

Under date of June 26th I wrote you suggesting your patent counsel investigate the references given in my letter.

I am wondering if there is any reply at this time.

Sincerely,

Walter Podbielniak
Walter J. Podbielniak
President

WJP:gg

cc: Mr. John R. Menke
Nuclear Development Associates, Inc.
33 West 60th Street
New York 23, N. Y.

The University of Chicago

CHICAGO 37, ILLINOIS

Institute of Radiobiology and Biophysics

7 August 1950

Mr. Walter J. Podbielniak
341 East Ohio Street
Chicago 11, Illinois

Dear Mr. Podbielniak:

I have your letter of August 1st.

I read the review article to which you referred me and I found no reference in it to anything similar to the gadget under discussion.

I also obtained photo-copies of the two Dutch patents to which you referred me. My Dutch is not good enough to understand them, but by looking at the drawings I gained the impression that we have nothing to fear from this side.

In the meantime, Mr. Menke sent me a copy of a communication which he received from one of the larger pharmaceutical firms which contained the following passage: "This is not intended to imply that interest in the device is lacking. To the contrary we would undoubtedly wish to purchase a unit in a finally proven form; and if it were possible to draw specifications now on operating efficiency and a reasonable guarantee on mechanical performance, we might even be in a position to place an order for future delivery."

My inclination is to say that we should follow up this clue and make some arrangement to build a model for delivery to this firm.

I wonder whether you would be interested in being included in any such arrangement. As to the novelty of the invention, I am in no position to make any statement and no exhaustive search is planned at this time.

Mr. Walter J. Podbielniak

The University of Chicago

CHICAGO 37, ILLINOIS

7 August 1950

Institute of Radiobiology and Biophysics
It would seem more appropriate that such a search be made by whoever takes on the commercial exploitation of this invention since he will probably wish to satisfy himself that he will not suffer for lack of novelty or because of U.S. patent rights controlled by others.

If you intend to follow up your interest in this matter, I propose that you write to Mr. Menke with a view of working out some definite arrangements soon after Labor Day.

I am enclosing the photo-copies of the two Dutch patents for your perusal, with the request that you send them back to Mr. Menke.

Sincerely yours,

Leo Szilard

LS/p

P.S. I am away from Chicago until after Labor Day but mail will be forwarded to me if addressed to me at the Quadrangle Club, 1155 E. 57th St., Chicago 37, Ill.

PODBIELNIAK, INC.

341 EAST OHIO STREET

Telephone SUperior 7-7825 7-7830

CHICAGO 11, ILL.

cc: Dr. Leo Sziliard

October 24, 1950

AIR MAIL

Mr. John R. Menke
Nuclear Development Associates, Inc.
33 West 60th Street
New York 23, N. Y.

Dear Mr. Menke -

I have your letter of October 19th and am glad that I seem to have sent you the right photostats.

As regards our interest in the centrifugal type counter-current liquid-liquid contacting device conceived by Dr. Sziliard, it is difficult for me to answer you specifically, without more knowledge than I possess. As I wrote Dr. Sziliard, there is considerable anticipation of his device in the patent and other technical literature, some of which I cited to him. It would take considerable time of a competent and technically trained patent attorney to make a reasonably thoro search for additional pertinent art and then render an opinion on whether 1) Dr. Sziliard's device does or does not infringe on some existing patents, and 2) it is possible to take out valid patents on Dr. Sziliard's device to justify development costs. Further, there are no test and performance data possessed by Dr. Sziliard or disclosed in the literature, to make it possible to evaluate its commercial possibilities as against devices for liquid-liquid extraction. Making and testing experimental models can be extremely expensive.

Summarizing it appears that at this time Dr. Sziliard has only an untested conception of undetermined performance and patent novelty. It does not to me appear to be so radically different in principle or so obviously likely to be superior in performance, as to justify serious interest or expenditure of considerable money on our part in its present state. In this I may be entirely wrong. I believe it is to

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Handwritten notes in top right corner:
H. J. Podbielniak
11/15/55
11/15/55
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your interest at least to invest in a patent search and authoritative opinion on patentability, as suggested above, and use this as a basis - if favorable - to induce cooperation on the experimental development and testing aspects.

Thanking you for submitting the matter for our consideration, I remain

Sincerely,

Walter J. Podbielniak

cc Dr. Leo Sziliard

c/o Quadrangle Club
1155 East 57th Street
Chicago, Illinois

