## The original documents are located in Box 9, folder "Immigration" of the Theodore C. Marrs Files at the Gerald R. Ford Presidential Library.

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UP WITH PEOPLE 3103 NORTH CAMPBELL AVENUE TUCSON, ARIZONA 85719 TELEPHONE 602 - 327-7351



European Office Avenue Père Damien, 21 1150 Brussels, Belgium Telephone (02) 62-09-18

July 2, 1975

Dr. Theodore Marrs, Special Assistant to the President, The White House Washington, D.C. 20500

Dear Dr. Marrs:

Mr. Joel Clark from the Grand Rapids Press asked me to write concerning a young Finnish girl, Pia Lindroos, who is currently a student in Grand Rapids.

She has been accepted into the Up With People educational program for this year. I understand there is some problem regarding her immigration status. This information, I believe, is being supplied to you from Grand Rapids.

This is to verify that she will be under the sponsorship of Up With People during this coming academic year.

We will be participating in many of the Bicentennial events across America and believe that any foreign students would make a significant contribution to the celebrations of America's 200th Anniversary.

Sincerely,

Jackson S. Hipps Director, Educational Programs

JSH/ts



# **VIA AIR MAIL**

Dr. Theodore Marrs, Special Assistant to the President, The White House Washington, D.C. 20500

RIZO

NORTH

3103

WITH PEOPLE

## July 14, 1975

Dear Mr. Whitehead:

I continue to appreciate the material you forward and the viewpoints expressed in your correspondence.

Thank you very much for your interest.

Sincerely,

## Theodore C. Marrs Special Assistant to the President

Mr. Ned Whitehead President Whitehead and Company 6208 Tally Ho Lane Alexandria, Virginia 22307

pft





itehead & Co.

TELEPHONE 703-768-1100

> Cable: NEDWHITE

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA, 22307

July 11, 1975



Dr. Theodore Marrs Special Assistant to the President The White House Washington, D. C. 20503

> RE: The Mitre Corporation Recommended Entry Document System

Dear Dr. Marrs:

Enclosed you will find copies of our letters of this date sent to Mr. David Muchow of the Department of Justice, Mr. James Percell of OMB and Commissioner Greene of INS, dated July 3rd, which are self-explanatory.

Sincerely,

WHITEHEAD & CO.

10 liter

NW:dlg Enclosures Ned Whitehead President

## Exclusively Indentification Material Since 1940

PHOTOGRAPHIC IMAGE PRINTED ON WHITE MAGNETIC STEEL . ABSOLUTE TAMPER-PROOF LAMINATED DOCUMENTS MAGNETIC CODES CHANGEABLE WHILE IN USE . MULTI-COLOR ENGRAVING . AUTOMATIC LAMINATING EQUIPMENT



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TELEPHONE 703-768-1100

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA. 22307 Cable: NEDWHITE

July 11, 1975

Mr. David Muchow Chairman, Federal Advisory Committee on False Identification Department of Justice Washington, D. C. 20001

> RE: The Mitre Corporation Recommended Entry Document System

Dear Mr. Muchow:

We have developed a truly counterfeit-proof entry document which does not have to be individually examined by Immigration Inspectors. Additional Inspectors, as requested by INS, are not needed with our system since each person admits himself through the Ports of Entry. For a matter of fact, the present number of these INS employees can probably be reduced. Where automobiles are used, an open car window will suffice.

We have accomplished the above important development by steel engraving BOTH sides of the thermoplastic covers in extremely intricate multi-colored designs in perfect registration with each other (PATENTS PENDING). At least 5 separate engraving plates, one for each color and design, are used on each side of the thermoplastic. After lamination, the document has the unique visual appearance of being three-dimensional, since the designs on the "back" have depth (the .10" thickness of the thermoplastic) whereas the designs on the "front" do not. Even if a person could be found with the necessary skill to be a counterfeiting steel engraver, he would be unable to duplicate the "back" designs since they are 60% covered by the "front" designs. There is absolutely no way to tell, after lamination, what the "back" copy or formats are. The only thing the counterfeiter would have to go by is the third-dimensional appearance which is impossible to engrave because of the depth and blending of the two sets of designs.

## Exclusively Indentification Material Since 1940

PHOTOGRAPHIC IMAGE PRINTED ON WHITE MAGNETIC STEEL . ABSOLUTE TAMPER-PROOF LAMINATED DOCUMENTS MAGNETIC CODES CHANGEABLE WHILE IN USE . MULTI-COLOR ENGRAVING . AUTOMATIC LAMINATING EQUIPMENT Mr. David Muchow July 11, 1975 Page Two

The document's third-dimensional designs are read instantly, at the speed of light, by an inexpensive holographic optical spatial filtering device which compares and matches the document being used with a genuine document permanently fixed in position within the holographic "reading device" (PATENT PENDING). No complicated electronics and expensive sophisticated computers. Only a \$200.00 gaslaser, a prism, lenses, mirrors, grids, grating deffractors and a small photoelectronic diode. A very rapid, inexpensive, reliable confirmation device. Each document has a magnetic tempered steel core for durability and magnetic coding or re-coding if the situation pertaining to the bearer changes. The holographic "reading device" has a built-in mini-computer to act as the "look-out-book". It also has a digital printer which delivers a tape recording of all of the facts about each admittance which can be sent to a central point by mail for a matter of record. There are means to match the bearer's fingerprint on the document placed there at the time of issue with the bearer's finger at the time of admittance to assure that he is the person to whom the document was originally issued.

We hope that you find the above description of our device interesting. If there are any questions, please get in touch.

Sincerely,

WHITEHEAD & CO.

Ned Whitehead President

NW:dlg

cc: Mr. James Percell Office of Management and Budget



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TELEPHONE 703-768-1100

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA. 22307 Cable: NEDWHITE

July 11, 1975

Mr. James Percell Chief, Economic and Government Section Office of Management and Budget Washington, D.C. 20503

> RE: The Mitre Corporation Recommended Entry Document System

Dear Mr. Percell:

May we respectfully suggest that a thorough cost analysis be made of the above Mitre plan to determine the actual cost of the program over a 5-year period. The items to be examined are as follows:

- A. The cost of the digitizing computers with which to convert the bearer's signature and fingerprint on Visa Cards issued by the State Department (3,000,000 yearly), INS Resident Alien Cards and INS Border Crossing Cards into encryptive codes as explained by Mr. Scott on page 946 of Part 2, Department of Justice, House Appropriations hearings. Over 250 such computers will be required at U.S. Consulates worldwide to issue Visas. Incidentally, this is the first step toward standardization of Entry documents.
- B. The cost of placing the above encryptive codes and other data on the documents including the lamination.

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- C. The man-hours cost for additional INS Inspectors at the 1,000-1,200 passageways to examine each document, the fingers of each applicant for phony fingerprints and the inserting of the documents into the slot of the "reading device." Please see Mr. Scott's testimony page 950 of Part 2, House Appropriations hearings.
- D. The price of 1,200 "reading devices" at each passageway.
- Ε. The cost of a centralized computer, and a stand-by, plus the cost of approximately 200,000 miles of cable to hook-up the above computer to all of the 400 Ports of Entry, or perhaps to each of the 1,200 passageways. Much of this cable will have to be the very expensive coaxial type to handle the heavy load during peak rush periods at a The great many of the Ports of Entry. testimony of Mr. Scott, page 949, Part 2 of the House Appropriations hearings, reveals that the encryptive code will be "read" at each passageway when the bearer applies for admittance. There is no explanation how the plan will handle a case when an illegal alien shows up with a document which has the original encryptive code thereon but also has the photograph of the illegal alien, the illegal alien's fingerprint and the signature of the original bearer written by the illegal alien in his handwriting style. The illegal alien will, of course, be fully briefed on the biographical information pertaining to the original bearer so that he can answer any questions. Furthermore, other illegal aliens can use the same encryptive code at all of the rest of the 399 Ports of Entry. Obviously, the encryptive code will have to be programed into a centralized computer so that it can be used only once at any Port of Entry by the authorized bearer and de-programed when the bearer leaves the United States at any Port of Entry. This would be of considerable advantage to INS regarding foreign visitors with their visa cards. We question the ability

Mr. James Percell July 11, 1975 Page Three

> of a centralized computer to handle the 48 digit encryptive code of 270,000,000 admittances and 270,000,000 departures each year in less than 5 to 7 minutes each, especially during peak rush periods. The inevitable delays at Ports of Entry will not he tolerated. The huge cost of such a sophisticated system certainly should be carefully examined. Incidentally, any gimmick which might be added to the document to prevent counterfeiting can be compromised, no matter what. Please note Commissioner Greene's testimony on page 950, Part 2 of the House Appropriations Hearings which revealed that 17 different gimmicks have been added to the present INS documents. At the present time, these documents are widely counterfeited.

F. The total man-hours cost, materials, and equipment amortization cost to issue the three types of documents (a total of 4,000,000 yearly) and the replacement of all of the old documents which exist at this time. In other words, what will each new document cost by the time it is handed to the bearer.

Sincerely,

WHITEHEAD & CO.

To I\_

Ned Whitehead President

NW:dlg

cc: Mr. David Muchow Department of Justice



TELEPHONE 703-768-1100

> Cable: NEDWHITE

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA. 22307 July 3, 1975.

Honorable James Greene, Acting Commissioner, Immigration and Naturalization Service, Washington, D.C. 20536.

Dear Mr. Commissioner;

In answer to yours of June 18 regarding counterfeiting I am sure that you know as well as I do that unless all Ports of Entry are connected to a centralized computer the Mitre plan is a waste of the tax payers's money.

The counterfeiting gang with \$5 million dollars to work with, received from only 10,000 illegal aliens at \$500 each, know very well that if the connecting wires are cut your activity is "out-of-business".

Whats to keep the wires from being cut? Can you guarantee the tax payer they will not be?

Sincerely

WHITEHEAD & CO. Ned Whitehead, Pres.

## Exclusively Indentification Material Since 1940

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#### THE WHITE HOUSE WASHINGTON

Date 8-19-75 TO: Bill ordy FROM: DR. THEODORE C. MARRS For your signature For your coordination For your information Per our conversation Other: Should this be areal the NSC

August 19, 1975



Dear Mrs. Baliantz:

This is to acknowledge and thank you for your letter of June 19, again calling to my attention the situation of Mr. Rudolf Mureyev's family. I have looked into this again and find that the appropriate people in the State Department are conscious of the problem. I am assured that it will continue to receive their serious attention.

I share your concern about the separation of the Mureyev family, and regret that at this time I am unable to give you encouraging news. I can only suggest that they persist in their petitions to the Soviet Mubassy.

with best wishes,

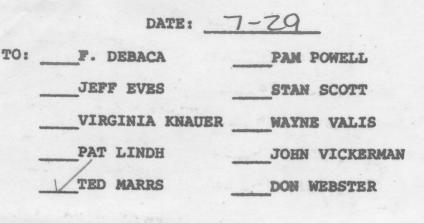
Sincerely,

William J. Baroody, Jr. Assistant to the President

Mrs. Armen Baliantz BALI'S Restaurant 310 Pacific San Francisco, California 94111

WJB:eb

#### THE WHITE HOUSE WASHINGTON



OM: WILLIAM J. BAROODY, JR.

FOR YOUR INFORMATION FOR APPROPRIATE ACTION FOR YOUR COMMENTS/ RECOMMENDATIONS OTHER:

8-4-75 tion Statt fling Should be and letter?

Mrs. Armen Baliantz BALI'S Restaurant 310 Pacific San Francisco, California 94111

June 19, 1975

Mr. William J. Baroody Jr. Assistant to the President The White House Office Washington D.C. 20500

Dear Mr. Baroody

This is a status report on the efforts of Mr. Rudolf Nureyev to have his mother, sister and niece visit him in the United States.

As the attached copies demonstrate, Mr. Nureyev filed with the Embassy of the USSR two petitions, one for his mother and the second for his sister and niece. After lengthy deliberation, the Soviet Embassy refused to approve the petitions.

As you are well aware, this matter was brought to your attention in January 1975, when Mr. Nureyev wrote a letter to President Ford requesting his assistance. Your office was kind enough to set up appointments with appropriate officials at our State Department, for me and Mr. Vartkes Yeghiayan, our attorney.

As a result of the meetings we had with the State Department and at the request of the Consular Section of the Soviet Embassy, Mr. Nureyev wrote a letter to the Soviet Embassy in Washington, requesting a visa for his family.

The Soviet Embassy responded by requiring the filing of formal petitions. These petitions were filed which, as indicated above were rejected.

It is two years now that at the request of Mr. Nureyev, I have been trying my utmost to assist his family. I filed petitions, as a United States citizen to have the Nureyev family visit me. I had no response from the Soviet Embassy. I even traveled to the Soviet Union to talk to Mrs. Nureyeva to see what I could do to assist her in obtaining an exit visa, but to no avail.

"WIB has see "

DR. MARRS HAS SEEN

I am sure, Mr. Baroody, you can appreciate that with the rejection of Mr. Nureyev's petitions by the Soviet Embassy in Washington, we have no other alternatives left but to turn to you and President Ford for assistance.

I have attached a number of pertinent documents to acquaint and assist you in your efforts to try and resolve this matter.

Mr. Nureyev is deeply appreciative of the President's concern and offer of assistance. The continued separation of the Nureyev family is not only a personal matter for the parties involved, but one which saddens the many persons closely acquainted with Mr. Nureyev.

I am ever so grateful for your concern and your sincere desire to be of help to us.

Sincerely Yours Armen Baliantz

No. 75/7753-1

United States of America



# DEPARTMENT OF STATE

us :

IOGI

эц,

all to whom these presents shall come, Greeting:

prtity That the document hereunto annexed is under the Seal of the State of

-----California----

PR-FORD LIBRARP

Secretary of State.

and God filly

Authentication Officer, Department of State

In testimony whereof, I, Henry A. Kissinger

Secretary of State, have hereunto caused the seal of the Department of State to be affixed and my name subscribed by the Authentication Officer of the said Department, at the city of Washington, in fifth

the District of Columbia, this fifth day of June 19.25

FOR THE CONTENTS OF THE ANNEXED DOCUMENT THE DEPARTMENT ASSUMES NO RESPONSIBILITY

artific.

t valid if it is removed or altered in any way whatsoever.



7507750 -1

I, MARCH FONG EU, Secretary of State of the State of California, hereby certify:

 That
 Robert J. Hare
 , whose name appears on the

 annexed certificate, was, on
 May 16, 1975
 , the duly elected,

 qualified and acting County Clerk of the
 City and
 County of

 San Francisco
 , in said State, and ex officio Clerk of the Superior

 Court of the State of California, in and for said
 San Francisco
 County;

 That the seal affixed thereto is the seal of said Court; that the signature thereon
 appears to be the signature of said
 Robert J. Hare

and that the annexed certificate is in due form and by the proper officer.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this 20th day of May, 1975

MARCH FONG EU Secretary of State

By 2 - t- section & Deputy Secretary of State

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to visit with me for <u>3</u> month.		, a costanounae arara.
	to visit with me for 3 month.	

Я обязуюсь полностью обеспечить содержание выжеуказанного лица за все время его пребывания в США, а, в случае необходимости, оплатить все расходы за его лечение и на приобретение обратного билета.

I pledge to give full support to the above named person during his s in the USA and, in case of need to pay all medical expenses and to secure a return ticket for him.

заполнения Date of filling

подпясь **AUCTBVIOE** Petitioner's signature

## SUBSCRIPEC AND SWORN TO BEFORE ME

E. Roberti J. Hare, County Clerk and Clerk of the Superior Court of the State of California, in and for the City and County of San Francisco, which Court is a Court of Record Baving by law a scal, DO HEREBY CERTIFY: That

KIRJEAHKIN

whose name is subscribed to the attached certificate of acknowledgment, proof or affidavit, was at the time of taking said acknowledgment, proof or affidavit, a Notary Public in and for the City and County of San Francisco, duly commissioned and sworn in said City and County, and was as such an officer of said State, duly authorized by the laws thereof to take and certify the same, as well as to take and certify the proof and acknowledgment of deeds and other instru-ments in writing to be recorded in said State, and that full faith and credit are and ought to be direct to his official acts: that the certificate of much officer is remuired to be under sealbe given to his official acts; that the certificate of such officer is required to be under seal; that the impression of his official seal is not required by law to be on file in the office of the County Clerk; I further certify that I am well acquainted with the handwriting of said notary and verily believe that the signature to the attached certificate is genuine, and further that the annexed instrument is executed and acknowledged according to the laws of the State of California.

In witness whereof, I have hereunto set my hand and annexed the seal of the Superior Court of the State of California, in and for the City and County of San Francisco.

MAY 1 6 '75

Dated:

No. 75/7759

# United States of America



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## DEPARTMENT OF STATE

all to whom these presents shall come, Greeting:

pertify That the document hereunto annexed is under the Seal of the State of .....

----California-

In testimony whereof, I, Henry A. Kissinger,

Secretary of State, have hereunto caused the seal of the Department of State to be affixed and my name subscribed by the Authentication Officer of the said Department, at the city of Washington, in the District of Columbia, this \_\_\_\_\_\_fifth

Entering 1

Authentication Officer, Department of State.

Secretary of State.

day of \_\_\_\_\_ Iune\_\_\_\_, 19.75\_

FOR THE CONTENTS OF THE ANNEXED DOCUMENT THE DEPARTMENT ASSUMES NO RESPONSIBILITY

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I, MARCH FONG EU, Secretary of State of the State of California, hereby certify:

That Robert J. Hare , whose name appears on the annexed certificate, was, on <u>May 16, 1975</u>, the duly elected, qualified and acting County Clerk of the <u>City and</u> County of <u>San Francisco</u>, in said State, and ex officio Clerk of the Superior Court of the State of California, in and for said <u>San Francisco</u> County; That the seal affixed thereto is the seal of said Court; that the signature thereon appears to be the signature of said <u>Robert J. Hare</u> and that the annexed certificate is in due form and by the proper officer.

No.

IN WITNESS WHEREOF, I execute this certificate and affix the Great Seal of the State of California this 20th day of May, 1975

MARCH FONG EU Secretary of State

Bur dente 12:6.6 1.262 Deputy Secretary of State

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Я обязуюсь полностых обеспечить содержание вышеуказанного лица за все время его пребывания в США, а, в случае необходимости, оплатить все расходы за его лечение и на приобретение обратного билета.

I pledge to give full support to the above named person during his sta in the USA and, in case of need to pay all medical expenses and to secure a return ticket for him.

заполнения

Date of filling

1CTR DESHKIN

Petitioner's signature

I, Robert J. Hare, County Clerk and Clerk of the Superior Court of the State of California, in and for the City and County of San Francisco, which Court is a Court of Record having by law a scal, DO HEREBY CERTIFY? That

whose name is substribed to the attached certificate of acknowledgment, proof or affidavit, was at the time of taking said acknowledgment, proof or affidavit, a Notary Public in and for the City and County of San Francisco, duly commissioned and sworn in said City and County, and was as such, amoliter of said State, duly authorized by the laws thereof to take and certify the same, as well as to take and certify the proof and acknowledgment of deeds and other instruments in writing to be recorded in said State, and that full faith and credit are and ought to be given to his official acts; that the certificate of such officer is required to be under seal; that the impression of his official scal is not required by law to be on file in the office of the County Clerk; Flurther certify that I am well acquainted with the handwriting of said notary and verily believe that the signature to the attached certificate is genuine, and further that the annexed instrument is executed and acknowledged according to the laws of the State of California.

In witness whereof, I have hereunto set my hand and annexed the seal of the Superior Court of the State of California, in and for the City and County of San Francisco.

6 Dated:

The Pierro FIFTH AVENUE AT GIST STREET, NEW YORK, N.Y. 10021 . (212) 838-8000

CABLE ACORESS DIERREOTEL

P. FORD LIBRAR

Mr. Sergei V. Kruglov Second Secretary and Consul Embassy of the USSR Washington D.C.

January 26, 1975

Dear Mr. Kruglov

On my authorization and at my request, Ers. Armen Balientz on October 30th, 1973, submitted an invitation for a temporary visitors permit for my mother, sister and niece ( Farida Nursyeva, Rosa Nursyeva-Ferdman, Gezel Nursyeva).

I have now been informed that in addition to all the efforts that have been undertaken and in order to expedite matters, I have to communicate with you directly.

Please accept this letter as my fervent wish to have my mother, sister and niece visit me.

E

I would very much appreciate your assistance in facilitatir their permit to travel.

Cordially

Judel Mourles



WHITE HOUSE MAIL RECERTION & SECURITY

Processed by

JUL 18 1975

Mr. William J. Baroody, Jr. Assistant to the President The White House Office Washington, D.C. 20500



hitehead & Co.

TELEPHONE 703-768-1100

Cable:

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DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA, 22307

August 30, 1975

Dr. Theodore Marrs Special Assistant to the President The White House Washington, D. C. 20503

Ref: The Entry Document System by the Mitre Corporation

ERAL

Dear Dr. Marrs:

There is a vast difference between the fingerprint verification technique we have developed and the one proposed by Mitre.

Our concept of comparing fingerprints by holographic spatial filtering requires that the finger be "rolled" on a prism to obtain an accurate match between the fingerprint on the entry document and the pattern on the finger. The underside of the finger is exposed by this movement and allows an instantaneous and automatic examination of this area by various means (patent pending) to determine if a counterfeit rubber or plastic fingerprint has been adhered to this surface of the finger. Obviously, this invention makes possible for an authorized applicant to quickly and most efficiently admit himself at a Port of Entry and thereby save the taxpayer millions of dollars.

The Mitre system, as developed by NBS for the FBI, is a computer controlled flying-spot scanning technique to digitize the fingerprint pattern. This technique requires that a fingerprint on a fingerprint card or a finger on a prism be absolutely <u>motionless</u> while the pattern is being scanned or "read". A counterfeit fingerprint cemented to the underside of a finger placed on the prism is therefore hidden from view and cannot be detected. Consequently, if reliable and effective verification is to be expected, <u>all ten fingers</u> of every applicant applying for admittance, particularly those in automobiles, must be carefully examined prior to placing a finger on the prism. This examination will necessitate that large numbers of additional INS Inspectors be employed, costing the taxpayer many unnecessary millions of dollars. Furthermore, such inspection will cause intolerable delays at the borders.

Enclosed herewith is a revised August summary of our

proposal.

Enclosure

Sincerely,

Exclusively Indentification Material Since 1940

PHOTOGRAPHIC IMAGE PRINTED ON WHITE MAGNETIC STEEL . ABSOLUTE TAMPER-PROOF LAMINATED DOCUMENTS MAGNETIC CODES CHANGEABLE WHILE IN USE . MULTI-COLOR ENGRAVING . AUTOMATIC LAMINATING EQUIPMENT A METHOD TO ENTRY DOCUMENT

YPTIVE CODED TRE CORPORATION

- Photograph the fingerprint, signature and encryptive code exactly as they appear on the original genuine document. Convert the negatives into positive films.
- 2. Use the positive films, with DuPont Cromalin transfer material (distributed locally by the Harold J. Pitman & Co.), to reproduce by heated impressions, a perfect duplicate of the fingerprint, signature and the encryptive code on counterfeit entry documents being manufactured.
- 3. Use the positive film of the fingerprint to etch in brass a "female" cavity or mould of the fingerprint pattern as per the attached etched sample.
- 4. Clean the etched cavity with solvent like Acetone to remove all foreign matter. Thoroughly dry after cleaning.
- 5. Fill the etched cavity with DuPont Teflon release material and drain-off all excess. Allow to dry for 10 minutes and apply, and drain-off, a second application. Allow the two applications of Teflon to dry not less than 30 minutes.
- 6. Evenly fill the etched cavity with 4 drops of a fleshcolored rubber or PVC solution. Allow to dry overnight. Do not use heat lamps since they will cause small bubbles to form while the PVC solution is drying.
- 7. After the flesh-colored PVC has dried lightly spray the area evenly with pressure sensitive adhesive. Wipe away, with Acetone, the excess adhesive around the edge of the fingerprint pattern. Lightly spray the same adhesive to the underside of a finger. Allow both areas to dry for at least 10 minutes.
- 8. Press the finger against the cavity and hold in position for 30 seconds. Upon lifting the finger, the counterfeit fingerprint will be adhered to the under surface of the finger and will be an absolute perfect reproduction of the original fingerprint which appeared on the genuine document. It will be accepted as the real thing by the Mitre fingerprint reading device.

WHITEHEAD & CO. July, 1975



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TELEPHONE 703-768-1100

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA, 22307 Cable: NEDWHITE

August 28, 1975

Honorable Leonard Chapman Commissioner Immigration and Naturalization Service Washington, D. C. 20536

Dear Mr. Commissioner:

In reply to yours of the 25th, I have been very busy with my research and seeing that my developments are properly filed at the Patent Office. The enclosed summary covers some of the features.

Our concept of comparing fingerprints by holographic spatial filtering requires that the finger be "rolled" on a prism to obtain an accurate match between the fingerprint on the entry document and the pattern on the finger. The underside of the finger is exposed by this movement and allows an instantaneous and automatic examination of this area by various means (patent pending) to determine if a counterfeit rubber or plastic fingerprint has been adhered to this surface of the finger. Obviously, my invention makes possible for an applicant to quickly and most efficiently admit himself at a Port of Entry and thereby save the taxpayer millions of dollars.

The Mitre system, as developed by NBS for the FBI, is a computer controlled flying-spot scanning technique to digitize the fingerprint pattern. This technique requires that a fingerprint on a fingerprint card or a finger on a prism be <u>absolutely motionless</u> while the pattern is being scanned or "read". A counterfeit fingerprint cemented to the underside of a finger placed on the prism is therefore hidden from view and cannot be detected. Consequently, if reliable and effective verification is to be expected, <u>all ten fingers</u> of every applicant applying for admittance, particularly those in automobiles, must be carefully examined prior to placing a finger on the prism. This examination will necessitate that large numbers of additional INS Inspectors be employed, costing the taxpayer many unnecessary millions of dollars. Furthermore, such inspection will cause intolerable delays at the borders.

I will call your Intelligence Office in the near future for an appointment to discuss the matter.

Sincerely,

WHITEHEAD & CO.

NW:dlg Enclosure

Ned Whitehead, President

Exclusively Indentification Material Since 1940

PHOTOGRAPHIC IMAGE PRINTED ON WHITE MAGNETIC STEEL . ABSOLUTE TAMPER-PROOF LAMINATED DOCUMENTS MAGNETIC CODES CHANGEABLE WHILE IN USE . MULTI-COLOR ENGRAVING . AUTOMATIC LAMINATING EQUIPMENT

#### COUNTERFEIT-PROOF STEEL ENGRAVED THIRD DIMENSIONAL ENTRY DOCUMENTS

## Introduction

The field of coherent optics has produced techniques whereby extremely complicated patterns can be recognized essentially at the speed of light. Recognition is the process of comparing two patterns and determining if matching or correlation exists between the patterns. This is known as "holography" from the Greek words "holos" meaning "total" and "graph" meaning "picture." A hologram is a kind of picture which can produce an image in three dimensions when it is illuminated with a laser beam and hence contains information about the "total picture." Three-D movies and stereo slides have been around for many years and produce the illusion of three dimensions, but the holographic image is far more realistic because the image is not just the illusion of three dimensions, but actually exists in three dimensions. With the holographic image one can actually "look around" objects to see what lies behind them just as one can move his head to look around objects and see what lies behind them in the real world. A very special hologram, called a spatial filter, has the capability of comparing two patterns and producing a signal which is a function of the correlation or similarity of the patterns. Experimentally, very intricate steel engravings proved acceptable. However, it has been found that complicated, natural objects with irregular patterns can be recognized with greater confidence than can man-made objects which tend to be geometrically symmetrical. Fingerprints, because of their randomness, are ideal objects for the spatial filtering method of recognition.

## A Counterfeit-proof Document

By using a Holographic Optical Filtering Recognition System we have developed, it is possible to very accurately compare the fingerprint on a document put there at the time of issue, with the fingerprint of the bearer at the time the document is used, thereby, guaranteeing that the document can be used ONLY by the person to whom it was originally issued. Below we explain in detail how we have approached and accomplished this very important security feature.

By using the same holographic system as above, it can be assured that a counterfeit document will be rejected by the reading device since ONLY a document with the correct thirddimensional intricate steel engraving thereon will be acceptable. The third-dimensional effect or appearance is accomplished by steel engraving BOTH sides of the thermoplastic covers prior to lamination (patents pending). For the best results, at least 5 intricate designs, each a different distinctive color, are applied to each side of the thermoplastic. The sum substance of this is, of course, that the document will be truly counterfeitproof. Below we shall explain how this is accomplished.

The need for a more reliable document which can be read automatically at our Ports of Entry by a person admitting himself is known by the Immigration Service. If this procedure is adopted, huge sums of money can be saved and at the same time a more dependable system put into use. Almost daily, the press reports that drug smugglers and illegal aliens are the most important problems we have at this time. A reliable identification system will greatly help remedy this situation.

#### Basic Concepts of the Spatial Filtering Technique

Since the spatial filtering process is relatively new, it is perhaps easiest to explain the concept by noting that when

- 2 -

a beam of light passes through any semi-transparent object, diffraction of the light takes place. Because of the wave nature of light, when a beam of light is partly intercepted by two materials of different optical density, or transmissivity, part of the light is deviated from its original direction. For example, as shown in Figure 1, suppose a beam of light is passed through a periodic grating composed of alternate opaque and transparent lines as shown in Figure la. Part of the light passes directly through the grating and is focused by the lens to form an image of the originating point source. This image is called the zero order image because it is formed by light rays which incurred no deviation from their original path by the grating. But part of the original ight is deviated or diffracted by the grating to various angles on each side of the undeviated rays. The diffracted light forms an infinite number of images of the originating point source on each side of the zero order image. These higher order images are known as the 1st, 2nd, etc., order images. If the illuminating source radiates white light, each of the many colors will be deviated at a slightly different angle and the images will appear as a rainbow or spectrum rather than as a simple point of white light.

Suppose instead of a white light source, a laser monochromatic or single color source illuminates the same grating. The images of the source will then be monochromatic and each image will be the same size as the source as shown in Figure 1b. The diffraction orders will be equally spaced on both sides of the zero order image and will extend infinitely in both directions, but since each successively higher order is less intense by an order of magnitude, only the first few orders can be seen. For this reason, only the first few orders are illustrated in the diagram.

- 3 -

The above method of diffraction produced images having three unique characteristics which is called the "invariant image." These characteristics are:

- 1. The grating can be moved laterally and vertically in the light beam without changing the position of the image.
- 2. The grating can be translated axially in the beam without changing the size or position of the images.
- 3. Since the images are really images of the source, if the lens system is ideal, the images should be exactly the same size as the light source.

All patterns can be thought of as combinations of straight and curved diffraction gratings. For example, the letter "T" may be thought of as a slit (or single line grating) in the vertical direction and a slit in the horizontal direction. Similarly, a fingerprint may be thought of as a series of curved gratings. The diffraction patterns characteristic of these objects is shown in Figure 2.

A spatial filter can be thought of as the diffraction pattern of an object recorded on black and white photographic film. For example, to make a spatial filter for the letter "T", the diffraction pattern characteristic of the letter "T" as shown in Figure 3a is photographically recorded. The developed film is the negative of the spatial filter that is desired, so it is contact printed or otherwise reversed to obtain the positive spatial filter as shown in Figure 3a.

It was mentioned earlier that the spatial filter is merely a special variety of hologram and, as such, it is possible to transform the spatial filter and to reconstruct the image of the original object. Figure 3b illustrates the reconstruction of the spatial filter to produce an image of the letter "T".

- 4 -

The main interest in spatial filtering is not that it can reconstruct an image of the original object. The primary application of the spatial filtering technique is that it can be used to recognize patterns. The basic recognition process is diagrammed in Figure 4. In this case, several different letters are used as the object. The light diffracted by the letters forms a pattern which is symmetrical about the zero order image. Suppose the positive spatial filter for the letter "T", which was constructed as described earlier, is placed in the filter plane as shown. The "holes" or transparent parts of the filter plane as shown. The "holes" or transparent parts of the filter will transmit only the information for the letter "T", with the diffraction information for the other letters being blocked by the opaque part of the filter. The focusing lens then reconstructs the diffraction image, but only where the light is transmitted. As a result, two "Ts" appear in the recognition plane in the same positions as they occupied in the original object.

## The Two-Beam Interferometric Process

The spatial filtering process described up to now involves a transformation of the light transmitted by the object during the construction of the spatial filter and, during recognition, a subsequent transformation of the light transmitted by the filter. While the net result has a component which reconstructs images of the patterns which are recognized, several other components are also present. These unwanted components produce ghost images which are superimposed on the desired recognition images. Under special conditions, those unwanted image components can be minimized using this single beam spatial filtering approach,

- 5 -

but in most cases they cause the desired image to become unintelligible by reducing the contrast of the image and by filling the recognition plane with spurious light.

The problem of these interacting images would be solved if a method were discovered which would physically separate the desired and undesired images. This is exactly what is done. The diffracted light leaving the object during the construction of the spatial filter contains both phase and amplitude information. That is, the light wavefront varies in intensity as well as in direction of propagation. Photographic materials can record only the amplitude information or differences in intensity and therefore all the information about the direction of propagation is lost using the single beam technique. This is the reason for the overlapping images in the recognition plane. Ideally, then, the spatial filter should reproduce both the phase and the amplitude effects which were present in the original wave diffracted by the object.

We have investigated methods by which both the phase information and the amplitude information can be recorded in a spatial filter. A "complex filter" is produced by converting the directional phase information into amplitude information which can be recorded on film. This is accomplished by interfering the information carrying beam with a second beam and hence this technique is referred to as the "two-beam process". At some points in the plane of intersection, the two-beams add in amplitude and at other points they cancel each other out. The net result is that the phase or directional information is recorded on photographic film. Figure 5 illustrates the construction of a spatial filter using a two-beam process.

- .6 -

It is a well-known principle of optics that when two beams originating from a coherent source are caused to intersect, an interference pattern is formed: the interference pattern in this case consists of many parallel lines, each about one thousandth of an inch wide. The resulting two-beam spatial filter is practically identical with the single beam filter described earlier, but with this fine line interference structure superimposed upon it.

While the physical appearance of the two-beam spatial filter is not much more impressive than was the single beam spatial filter, there is a significant improvement in the recognition process. The optical system used for recognition is shown in Figure 6. Observe that it is practically identical to that used in the previous recognition system. The difference is that part of the beam, after passing through the two-beam spatial filter is diffracted below the axis of the optical system by the fine-line structure of the filter and therefore the problem of overlapping images is eliminated. If recognition takes place, a very bright pinpoint of light will appear in this plane below the optical axis and is subsequently referred to as a recognition spot. As you remember, in the case of the single beam spatial filter, the letter "T" was recognized by straining out all the information that was not part of the "T" and then reconstructing the remaining "T" information. Using the two-beam approach, however, if the letter "T" is recognized, a recognition spot is formed; if "T" is not present, then no recognition spots appear. The example of Figure 6 shows the recognition system, object, and spatial filter to find the letter "T". Two points of light are shown in the first order recognition plane and correspond to the recognition of the two letter "Ts" in the object. This form of information lends itself readily to automatic processing systems. Either we have the information present and a subsequent

- 7 -

recognition spot, or we do not have the desired information and no recognition spot. By sampling the recognition plane with a light detector, it is possible to build a system which, when it recognizes the desired information executes electronic circuitry.

Of course the letter "T" represents a simplified pattern, but the system seems to work even better for more complicated patterns. We are not interested in recognizing "Ts", but are interested in recognizing fingerprints and intricate steel engravings. Advantages and Disadvantages Based on Present Work

The spatial filtering method of third-dimensional steel engraved documents and fingerprint recognition has several advantages over other methods of recognition.

A. Recognition is instantaneous, limited only by the mechanical pattern input mechanism.

B. Partial images can be recognized. As long as most of the information which is available does correlate, recognition will take place even though one of the two patterns being compared is incomplete. This property is especially advantageous when you are attempting to correlate partial latent prints on a prism with a complete print on a document. The lateral, vertical, longitudinal and depth position in the system of the object to be recognized is not critical.

C. The recognition and verification of fingerprints using lasers and the two-beam holographic spatial filters can be accomplished by two methods. One is to transfer the negative image of the bearer's fingerprint to an opaque white core so that it can be reflected. The other method, the preferred one, is to punch a hole in the white core and transfer the negative fingerprint image directly to the thermoplastic cover so that after lamination it will be within the area punched-out (as shown by figure 7). The document placed by the bearer in a slot of the "reader", therefore, has the negative image and transparent area in the correct position (patents pending)

- 8 -

so that in effect the laser beam passes through the transparent part of the negative fingerprint pattern. When the bearer "rolls" his finger on the prism, located along side of the slot of the "reader", the pattern of the finger is reflected as a positive transparency which then acts as the holographic spatial filter of the laser beam which has passed through the "negative". Please note that when the finger is "rolled" the underside is exposed making possible to use available systems as a means to detect if a counterfeit "rubber" fingerprint pattern has been adhered to the underside of the bearer's finger (patents pending). A bright recognition spot reveals that the bearer's finger on the prism matches the fingerprint negative on the entry document indicating that the bearer is using a document issued to him originally.

The recognition of the very intricate multi-colored steel engraved third-dimensional entry document using a two-beam spatial filter is shown by figure 8. (Patents pending.) In this instance, a negative film .005" thick of the multiple steel engravings on the FRONT of the thermoplastic covers is adhered back to back in registered position with another negative also .005" thick of the multiple steel engravings of the BACK of the thermoplastic covers, thereby creating a third-dimensional image with depth. This assembly is fixed in a permanent position within the "reader". Two oscillating laser beams about 1" apart pass through the transparent negative third-dimensional films of the multi-steel engravings. (As shown by figure 8.) A positive print of the intricate steel engravings is engraved on BOTH sides of the .010" thick thermoplastic cover in registration with each other. Upon lamination, the combined image of the two sets of steel engravings is in third-dimension and matches the above first step of this description. A reflection of the laminated multi-colored third-dimensional steel engraved entry document acts as the holographic spatial filter of each of the two laser beams.

- 9 -

Two bright recognition spots reveal that the bearer is using an entry document which is a completely genuine document and not a counterfeit. It is interesting to note that several locations or areas of the third-dimensional, back-to-back, negatives can be chosen so that, let's say, three points of verification can be used at the same time and thereby make counterfeiting all the more impossible. To change the coding technique these areas can be changed at will to recognize similar areas on the genuine document placed in the slot of the "reader". Photo-electric diodes, in series, will be actuated by the several bright recognition spots which in turn will also be in series with the fingerprint verification diode.

With other techniques such as the computer controlled flying-spot scanner to digitize the fingerprint pattern or Vidicon scanning techniques, the position of the subject can be extremely critical in determining recognition. There cannot be the slightest movement. With spatial filtering, this is not important. The relative rotational positions of the object and the spatial filter need only to be accurate to within plus or minus 3 degrees for correlation to take place using the spatial filtering technique. The usual "flying-spot" or Vidican scanning techniques require rotational alignment within a very small fraction of a degree. Even the pulse of the finger placed on a prism can effect the reading of the fingerprint.

D. The recognition or matching of the document placed in the slot of the "reader" and its third-dimensional steel engraved designs with the same third-dimensional designs permanently fixed in position within the "reader" is an ideal application for spatial filtering.

E. The input objects to the system must be in transparency form. Since spatial filtering depends on the diffraction of light, objects not in transparency form cause too much light to be scattered to produce good diffraction images.

- 10 -

One disadvantage of spatial filtering, as we propose to use it, and to many other types of automatic recognition systems, is that the typical latent prints which are to be correlated are very noisy. That is, the signal, or perfect print, is obscured by dirt and surface roughness or is distorted by too much pressure of the finger when placed on the prism. The bearer can be instructed to clean the finger and "roll" the finger back and forth across the prism. In our tests this procedure, even with "dirty" fingers, results in successful operation. Of course, an applicant trying to use a phony fingerprint cemented to the underside of his finger would be immediately apprehended when the underside of the finger is exposed by this movement which allows an instantaneous and automatic examination of this area by various means. A "good" fingerprint on the document at the time of issue is no problem since manual observation can assure this degree of perfection.

#### In Conclusion

It is a fact that holographic optical reading devices will save the taxpayer huge amounts of money and at the same time perform the task of automatically inspecting entry documents much more efficiently than any human. This cannot be ignored. Especially so in view of the fact that the "readers" we have designed will cost only a fraction of the cost of an encryptive code "reader". Expensive sophisticated computers to digitize a fingerprint and the computers to perform the rest of an entrance system based on this technique are very expensive and most likely to give operational trouble. The "reader" we recommend confirms most efficiently the genuineness of the entry document, the authenticity of the bearer, the built-in mini-computer as the "look-out-book" apprehends those bearers wanted by the authorities and a digital printer delivers a tape giving a record of "whowhere-when-why" used the device. All this is done automatically with minimum amount of supervision, thereby saving huge sums of money.

> WHITEHEAD & CO. August, 1975

- 11 -

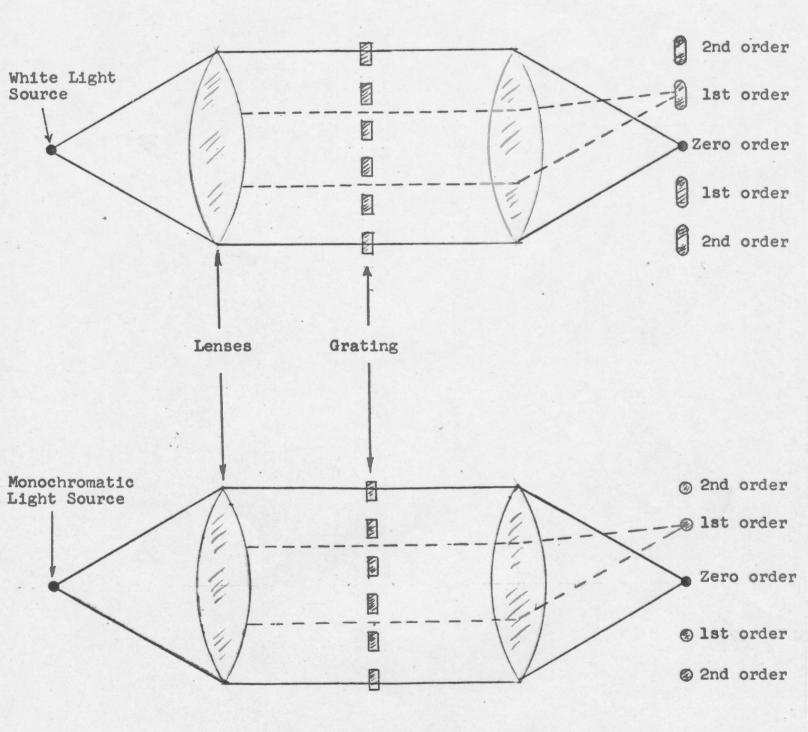
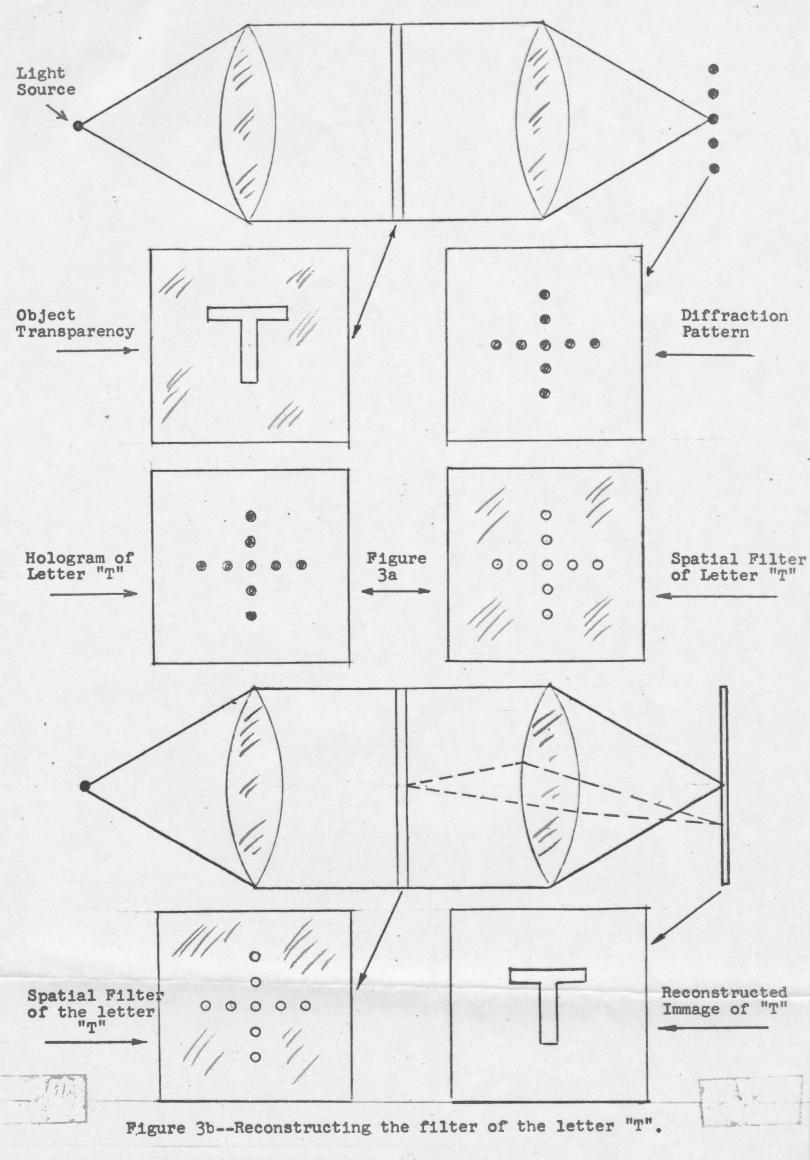


Figure la--Diffraction of white light by grating.

Figure 1b--Diffraction of monochromatic light by grating.

Figure 2 -- Diffraction pattern of the letter "T".



14 . \*

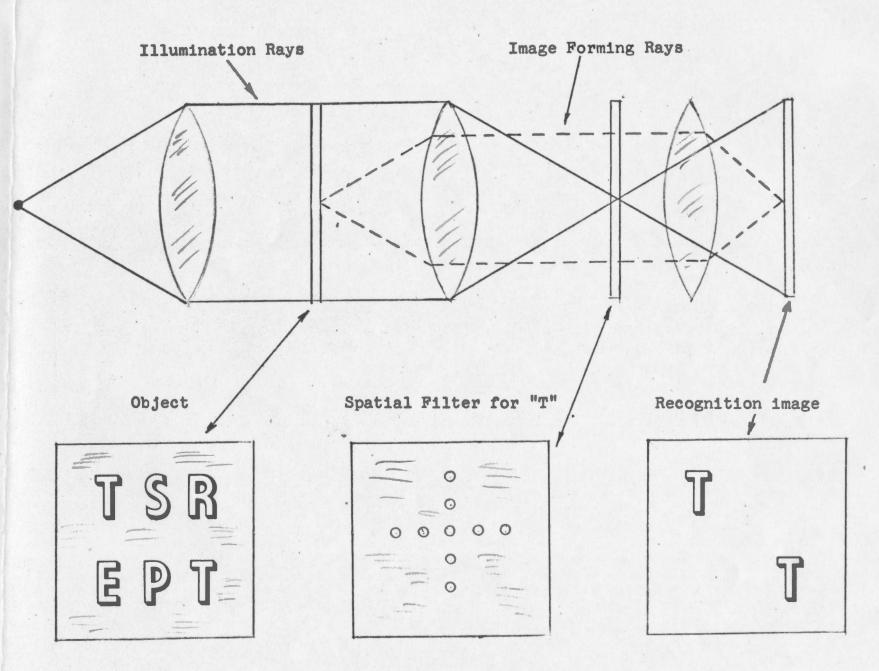


Figure 4--Recognition of the letter "T" using a single-beam spatial filter.

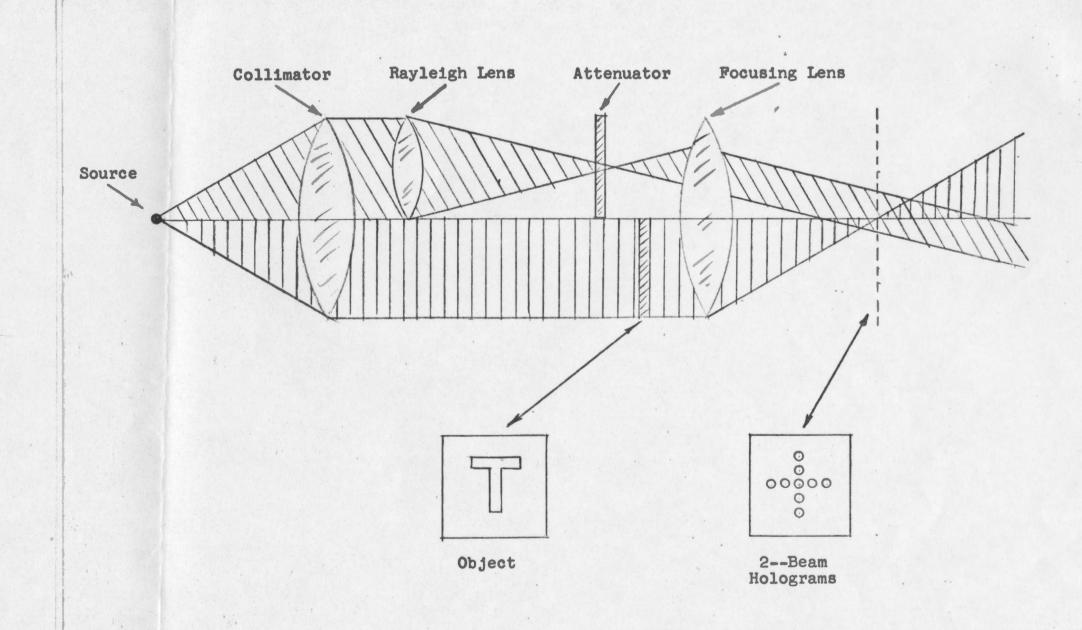
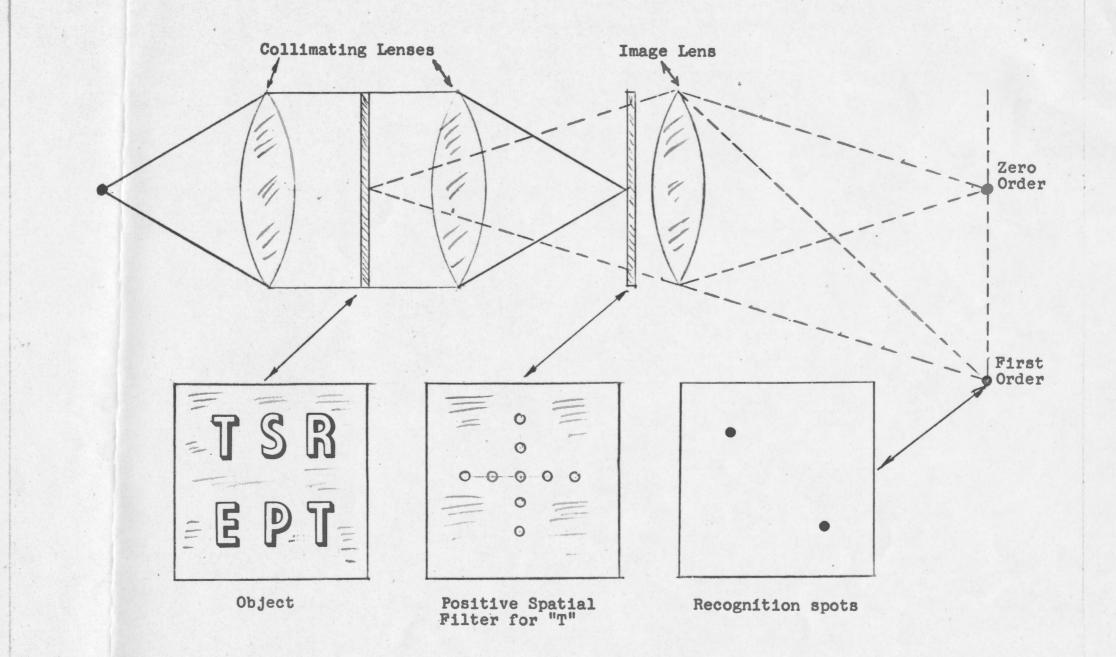
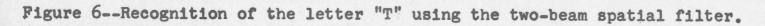
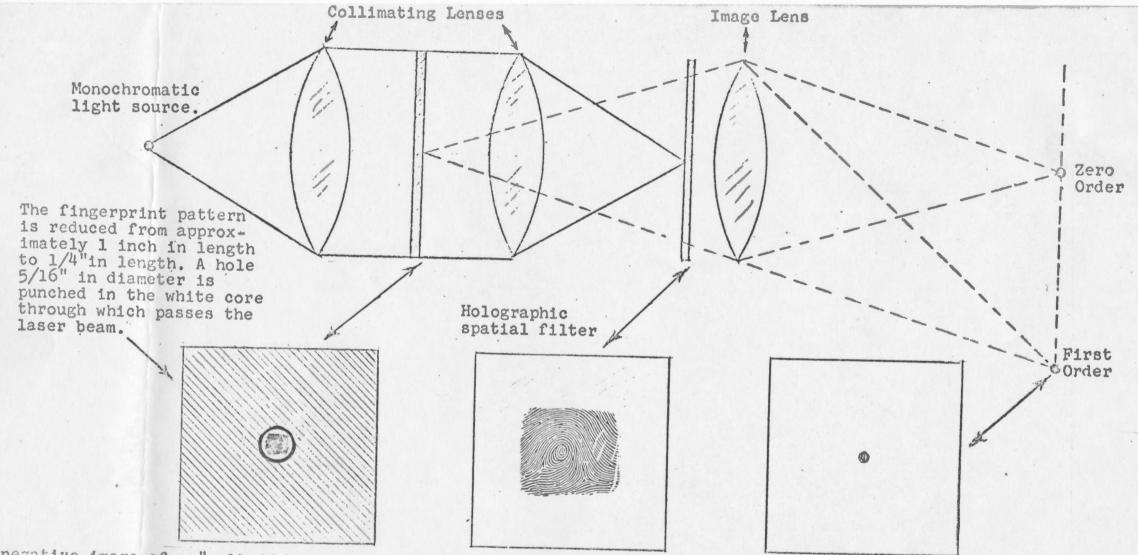


Figure 5--Constructing a two-beam spatial filter of the letter "T".





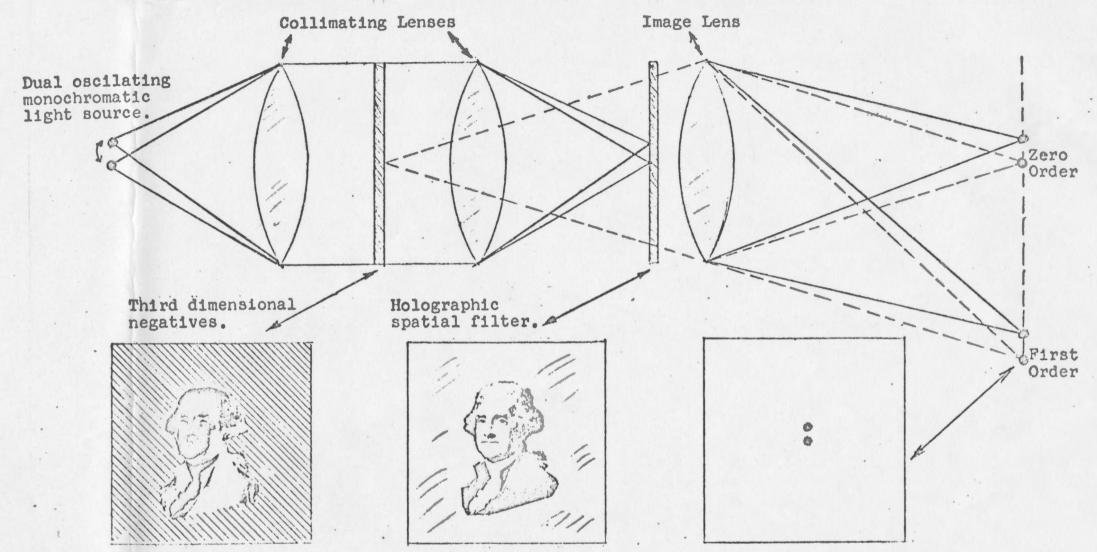


A negative image of a "rolled" bearer's fingerprint, reduced in size to save space, is transfered to the surface of the thermoplastic cover. A hole slightly larger than the size of the fingerprint is punched in the white core prior to lamination. After issuance the bearer has a document to be used for admittance by personally placing it in the slot of the READER. A laser beam passes through the transparent part of the fingerprint negative and the "hole" toward the holographic spatial filter.

The bearer's finger "rolled" on the prism of the READER at the Port of Entry is reduced to the proper size and reflected as a positive fingerprint pattern. This positive acts as a holographic spatial filter of the laser beam coming from the document in the slot of the READER.

A very bright recognition spot reveals that the document placed in the slot of the READER has the same fingerprint pattern (negative) as the finger "rolled" on the prism (positive) of the person applying for admittance. If there was a counterfeit fingerprint pattern cemented to the underside of the finger of a person trying to gain admittance an immediate warning signal would be given and the person caught.

Figure 7--The recognition and verification of a "rolled" fingerprint pattern using a two-beam holographic spatial filter.



A negative film .005" thick of the steel engraving on the FRONT of the thermoplastic cover is cemented back to back in a fixed position with another negative also .005" thick of the steel engraving on the BACK of the thermoplastic cover, thereby, creating a third-dimensional image with depth. This assembly is fixed in position within the "reader". Dual oscilating laser beams pass through the negative films of the third-dimensional steel engravings.

A positive print of the intricate steel engravings are engraved on BOTH sides of the .010" thick thermoplastic cover in registeration with each other prior to lamination. After lamination the image is in thirddimension and matches the first step of this description. A dual reflection of this entry document acts as the holographic spatial filters of the laser beam.

Two bright recognition spots reveal without question that the bearer is using a genuine third-dimensional entry document.

Figure 8--Recognition of the very intricate multi-colored steel engraved third-dimensional entry document using a twobeam spatial filter.

#### WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

FORM OF DOCUMENT	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
Letter	Letter from Chu Gia Thoai to Theodore Marrs concerning sponsership of his family in the U.S. (4 page)	c. 09/1975	С
File Location:			

File Location:

Theodore Marrs Papers, Box 9, Immigration / TMH / 07/14/2015

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- (B) Closed by statute or by the agency which originated the document.
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NATIONAL ARCHIVES AND RECORDS ADMINISTRATION



A REAL

THE WHITE HOUSE WASHINGTON

Date 9-22-75

TO: OMB				
FROM: DR. THEODORE C. MARRS				
For your signature				
For your coordination				
For your information				
Per our conversation				
Other: For appropriate consideration.				

物识



itehead & Co.

TELEPHONE 703-768-1100

CF

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA. 22307 September 19, 1975. Cable: NEDWHITE

FOR

a.

Dr. Theodore Marrs, Special Assistant to the President, The White House, Washington, D.C. 20503.

> Subject: Durable Visas and other Entry Documents.

Dear Dr. Marrs;

The inclosed letter dated August 29th received from Commissioner Chapman may be of interest to you. We also inclose our reply of September 8th.

I understand that the Immigration Service are delaying and "sidestepping" the matter of having aging and durability tests made by independent and unbiased laboratories. There is no reason for this delay since they know very well how the new Entry Document will be made and of what material, which, incidently has nothing to do with the Security of the document.

Please allow me to recommend that all funds for the new system be held-up by OMB until favorable durability reports are received from the National Bureau of Standards and a reliable, unbiased Commercial Laboratory.

To issue the New Entry Document system and then find out that in two or three years they crack and break would be disastrous.

Sincerely

HITEHEAD & CO. Ned Whitehead

President.

# Enclusively Indentification Material Since 1940

PHOTOGRAPHIC IMAGE PRINTED ON WHITE MAGNETIC STEEL . ABSOLUTE TAMPER-PROOF LAMINATED DOCUMENTS MAGNETIC CODES CHANGEABLE WHILE IN USE . MULTI-COLOR ENGRAVING . AUTOMATIC LAMINATING EQUIPMENT



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DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA, VIRGINIA. 22307 703-768-1100

Cable: NEDWHITE

September 8, 1975

Honorable Leonard Chapman Commissioner Immigration and Naturalization Service Washington, D. C. 20536

Dear Mr. Commissioner:

Replying to yours of the 29th regarding our letter to Dr. Theodore Marrs, sent to you by Attorney General Levi, I wait with interest the independent and unbiased Bureau of Standards and Commercial laboratory reports on the 7-year aging and durability tests of the Mitre Corporation recommended all-plastic credit card type of entry document.

In the event the reports are unfavorable, we offer a document with a steel core of such temper and flexibility it will pass a similar test for a 10-year period of time (patents pending).

We understand that Mitre is also recommending that the new document have included "special features" which supposedly will prevent counterfeiting. This is a surprise since, according to testimony, their encryptive coding is infallible. Of course, shortly after the new Mitre documents are issued all the facts about the added "features" will be in the hands of experienced and skilled counterfeiters simply because MONEY TALKS. A \$50,000 cash tax-free bribe will undoubtedly do the trick. You can stake your reputation on the fact that anything which INS can add to an entry document can also be added to a phony by a counterfeiter. Please remember that, according to testimony, there are now 17 versions of the present INS documents in use, all added after the first issue, and there are still counterfeits.

In the event you decide NOT TO GAMBLE with the ability of counterfeiters to compromise the Mitre document, we offer a truly counterfeitproof, multi-engraving plate and multi-colored steel engraved thirddimensional document, without added gimmicks, read by holography, which makes possible for a person applying for admittance to quickly and most reliably admit himself by personally placing his document in the slot of the READER and then "roll" his finger on a prism. (Patents pending.) We very clearly outlined these wonderful advantages to you in our letter of August 28th.

Sincerely,

WHITEHEAD & CO.

Ned Whitehead, President

cc: Dr. Theodore Marrs

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# UNITED STATES DEPARTMENT OF JUSTICE IMMIGRATION AND NATURALIZATION SERVICE WASHINGTON, D.C. 20536

PLEASE ADDRESS REPLY TO

OFFICE OF THE COMMISSIONER

13

AUG 2 9 1375

AND REFER TO THIS FILE NO

CO 1285-P

Dear Mr. Whitehead:

In your letter dated July 21, 1975, to Dr. Theodore Marrs, you recommend that the new alien identification card be subjected to aging and durability tests. Accelerated aging and durability tests are, in fact, an integral part of the ADIT System development plan.

Two other issues which you mentioned are also addressed in the project protocol. First, the need to avoid multiple versions of valid cards was identified in conjunction with the requirements analysis effort. Secondly, the requirement for special security provisions is targeted for analysis and implementation of new provisions early in the project life cycle.

The Immigration and Naturalization Service is making a concerted effort to insure that all aspects of the ADIT System environment are being scrutinized. Thank you for your interest in the success of this project.

Sincerely,

Chapman, Commissioner

Mr. Ned Whitehead, President Whitehead and Company Division-Selectronics Corporation 6208 Tally Ho Lane Alexandria, Virginia 22307



tehead &

TELEPHONE 703-768-1100

Cable: NEDWHITE

DIVISION - SELECTRONICS CORPORATION 6208 TALLY HO LANE, ALEXANDRIA. VIRGINIA. 22307

August 28, 1975

Konorable Leonard Chapman Commissioner Immigration and Naturalization Service Washington, D. C. 20536

Dear Mr. Commissioner:

In reply to yours of the 25th, I have been very busy with my research and seeing that my developments are properly filed at the Patent Office. The enclosed summary covers some of the features.

Our concept of comparing fingerprints by holographic spatial filtering requires that the finger be "rolled" on a prism to obtain an accurate match between the fingerprint on the entry document and the pattern on the finger. The underside of the finger is exposed by this movement and allows an instantaneous and automatic examination of this area by various means (patent pending) to determine if a counterfeit rubber or plastic fingerprint has been adhered to this surface of the finger. Obviously, my invention makes possible for an applicant to quickly and most efficiently admit himself at a Port of Entry and thereby save the taxpayer millions of dollars.

The Mitre system, as developed by NBS for the FBI, is a computer controlled flying-spot scanning technique to digitize the fingerprint pattern. This technique requires that a fingerprint on a fingerprint card or a finger on a prism be <u>absolutely motionless</u> while the pattern is being scanned or "read". A counterfeit fingerprint cemented to the underside of a finger placed on the prism is therefore hidden from view and cannot be detected. Consequently, if reliable and effective verification is to be expected, all ten fingers of every applicant applying for admittance, particularly those in automobiles, must be carefully examined prior to placing a finger on the prism. This examination will necessitate that large numbers of additional INS Inspectors be employed, costing the taxpayer many unnecessary millions of dollars. Furthermore, such inspection will cause intolerable delays at the borders.

I will call your Intelligence Office in the near future for an appointment to discuss the matter.

Sincerely,

WHITEHEAD & CO. Ned Whitehead, President

NW:dlg Enclosure

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# WITHDRAWAL SHEET (PRESIDENTIAL LIBRARIES)

FORM OF	CORRESPONDENTS OR TITLE	DATE	RESTRICTION
FORM OF DOCUMENT Cable	CORRESPONDENTS OR TITLE Cable from Dr. Dorothy Shih-Cheng Sung Lin to Theodore Marrs - requesting assistance in obtaining exit permits (17 pages)	DATE c. 5/3/1976	C

File Location:

Theodore Marrs Papers, Box 9, Immigration / TMH / 07/14/2015

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