

EXHIBIT 1

**HOHBACH
TEST
ALBRITTON
& HERBERT**

**CONFIRMATION
COPY**

Patent, Trademark & Copyright Law

April 11, 1989

VIA FACSIMILE

4 Embarcadero Center
Suite 3400
San Francisco, CA
94111-4187

(415) 781-1989

200 Page Mill Road
Suite 200
Palo Alto, CA 94306-2022
(415) 324-8888

Harold C. Hohbach
Aldo J. Test
Thomas O. Herbert
Donald N. MacIntosh
Jerry G. Wright
Edward S. Wright
David J. Brezner
Richard E. Backus
Stephen E. Baldwin
Stephen C. Shear
Henry K. Woodward
William J. Egan III
Reginald J. Suyat
James A. Sheridan
Philip A. Dalton
Robert B. Chickering
Gary S. Williams
Keiichi Nishimura
Willis E. Higgins
Richard F. Treecartin
Miriam E. Majofis
Richard P. Doyle, Jr.
Steve D. Beyer
Patrick T. King
Steven J. Adamson

OF COUNSEL
Paul D. Flehr
Marcus Lothrop
Baylor G. Riddell
Edward B. Gregg, PC
Julian Caplan

Elmer S. Albritton
(1922-1988)

San Francisco
Cable: FLEHRSF
Telex: 910 277299
FHT UR
Telecopier: (415) 398-3249

Palo Alto
Telecopier: (415) 324-9018

Daniel E. Leckrone, Esq.
Leckrone Law Corporation
4010 Moorpark Avenue, Suite 215
San Jose, California 95117

Re: Proposed Patent Application on
HIGH PERFORMANCE MICROPROCESSOR
Our File: A-50412/WEH

Dear Daniel:

My apologies for not following through with a written budget and timing proposal, but I was waiting to hear further from you. The following substantially confirms and supplements the discussion right at the end of our meeting.

My best estimate for a budget on this project at this point is \$25,000. The total cost is based on my hourly rate of \$190, plus out of pocket expenses. This should not be considered a quote. I can only quote after I have the material in hand that I will use to prepare the application. If you wish, I can give a quote after I have the complete documentation for preparing the application. In any event, I will let you know after I have the documentation if the project appears to be more complex and costly than I now anticipate based on our conferences. If the complete documentation is usable for the detailed description of the invention, this will help to keep the cost down. The standard is that the description must be complete enough to allow someone knowledgeable in the field to practice the invention, and must include the best way that the inventor knows to carry out his invention at the time the application is filed. I usually add the reference numbers to the description myself, since this is often frustrating and inefficient for the client.

From a timing standpoint, I will commit to filing the application within six weeks of receiving the go-ahead, including the complete documentation and retainer. I would anticipate completing a rough draft for the application within 3-4 weeks after go-ahead, with the remaining time for review, modification and addition to the draft. I envision a single application with claims directed to all

PATRIOT 028019

April 11, 1989

Page 2

of the features believed to be potentially patentable, which would be the 15 features identified in our meeting, in the absence of any prior art known to us or the client clearly making them unpatentable. The Patent and Trademark office will probably divide up the features into at least several applications, but there are strategy and time/cost advantages in filing them together initially.

This budget is for filing the application, and it does not include prosecution costs. Prosecution costs depend on the positions taken by the Patent and Trademark Office. A very rough guideline for prosecution costs is to plan on an amount equal to approximately half the cost of filing over the next two or three years. Also not included are any international applications or a search. In view of your tight deadline, we may wish to file without search. Dialog searches on the 15 features would probably cost between \$3,000 and \$4,000.

For a new client of unknown financial standing for a project of this magnitude on such a tight schedule, we require a retainer of at least half the budget amount when we begin work. We will bill at the end of each month for work done during that month, with payments on the monthly bills to be made in addition to the retainer, in order to minimize the amount due on completion. The balance will be due on completion, before the application is filed in the U.S. Patent and Trademark Office.

Please let me know when you are ready to proceed. Please feel free to call if you have any questions, comments or further instructions.

Very truly yours,

FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT

Willis E. Higgins

WEH:mb

cc: Mr. Russell H. Fish III

PATRIOT 028020

EXHIBIT 2

**FLEHR
HOHBACH
TEST
ALBRITTON
& HERBERT**

Patent, Trademark & Copyright Law

October 1, 1990

4 Embarcadero Center
Suite 3400
San Francisco, CA
94111-4187
(415) 781-1989

200 Page Mill Road
Suite 200
Palo Alto, CA 94306-2022
(415) 324-8888

Harold C. Hohbach
Aldo J. Test
Thomas O. Herbert
Donald N. MacIntosh
Jerry G. Wright
Edward S. Wright
David J. Brezner
Richard E. Backus
Stephen E. Baldwin
William J. Egan III
Reginald J. Suyat
James A. Sheridan
Robert B. Chickering
Gary S. Williams
Keiichi Nishimura
Willis E. Higgins
Richard F. Trecartin
Richard P. Doyle, Jr.
Stephen C. Duran
C. Michael Zimmerman
Patrick T. King
Steven J. Adamson
Kristin Hansen
Karen S. Smith
Paula N. Chavez

OF COUNSEL
Paul D. Flehr
Marcus Lothrop
Edward B. Gregg, PC.
Julian Caplan

Elmer S. Albritton
(1922-1988)

San Francisco
Cable: FLEHRSF
Telex: 910 277299
FHT UR
opier: (415) 398-3249

Palo Alto
Telecopier: (415) 324-9018

Mr. Russell H. Fish
P.T. Acquisitions
750 Shoreline Blvd., Suite 85
Mountain View, CA 94043

Re: Payment Guarantee by Daniel E. Leckrone
Our File: A-50412/WEH

Dear Russ:

As you requested, enclosed is a copy of Dan's written guarantee to pay for the patent application within 60 days of filing. We have reviewed our files for other documentation of the circumstances surrounding the filing and payment for this patent application and the subsequent international filing, and enclose copies of the correspondence we have found.

These documents do not tell the complete story. As I continued to press Dan after my March 13, 1990 letter to make good on his guarantee, he claimed that you had gone "non-linear" and more or less abandoned the project, after destroying the relationship with Oki. See my March 13 and May 21, 1990 letters. By the time of the May 21 letter, I believed that you were no longer active on the project. I therefore carboned Chuck Moore, but not you.

When the August 3, 1990 deadline for international filing was coming close, rather than allow the rights to be forfeited, I told Dan that I would accept a payment on the overdue account at least equal to the international filing charges plus the international filing charges for proceeding. After some negotiation with him, I agreed to accept the amount of \$8,000.00 from him, with the excess not applied to the international filing being applied to the overdue account.

During these negotiations, he told me that he was acting on behalf of Chuck Moore and that he wanted to make sure that the international rights were not lost for Chuck. He also inquired if it was possible to separate Chuck's inventive contributions from yours. Based on my belief that your primary contribution was the clock circuit, I told him that this could be done by canceling the claims to the clock

Mr. Russell H. Fish, III
October 1, 1990
Page 2

circuit and any other contribution of yours from the application. I later found out from Chuck that your contributions were much more extensive than the clock circuit, and then advised both of them that such a separation would not be feasible.

Dan sent his personal check for \$8,000.00 to me, with instructions not to cash it until he gave me a go-ahead. At this point, you called me, and I found out for the first time that you had not abandoned the project, and that you were actively negotiating with two companies for rights on the microprocessor. When you said to me that you were also speaking for Chuck Moore, I had my own conversation with him to see who was speaking for him, in which he said that he spoke for himself.

Now that I knew you in fact had not abandoned the project and were able to cover the \$8,000.00 for international filing, it was clear to me that I should proceed with you. I then returned Dan's check to him.

I do not know whether these documents and this narrative will be of any assistance to you. Please feel free to call if you have any questions, comments or further instructions.

Very truly yours,

FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT



Willis E. Higgins

WEH:mb
Enclosures

EXHIBIT 3

DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled
HIGH PERFORMANCE, LOW COST MICROPROCESSOR

the specification of which

(check ☒ is attached hereto.
one)

☐ WAS filed on _____ AS
Application Serial No. _____
and was amended on _____
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)			Priority Claimed	
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes	<input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulation, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing Date)	(Status)
_____	_____	(patented, pending, abandoned)
_____	_____	(Status)
_____	_____	(patented, pending, abandoned)

I hereby appoint the following attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: Paul D. Flehr, Reg. No. 12,145; Harold C. Hobbach, Reg. No. 17,757; Aldo J. Test, Reg. No. 18,048; Thomas O. Herbert, Reg. No. 18,612; Donald M. Macintosh, Reg. No. 20,316; Jerry C. Wright, Reg. No. 20,165; Edward S. Wright, Reg. No. 24,903; David J. Brezner, Reg. No. 24,774; Richard E. Backus, Reg. No. 22,791; Stephen E. Baldwin, Reg. No. 27,769; Stephen C. Shear, Reg. No. 25,764; Henry K. Woodward, Reg. No. 22,672; William J. Egan, Reg. No. 28,411; Reginald J. Suyat, Reg. No. 28,172; James A. Sheridan, Reg. No. 25,435; Robert B. Chickering, Reg. No. 24,286; Willis E. Higgins, Reg. No. 23,025; Gary S. Williams, Reg. No. 31,066; Keiichi Nishimura, Reg. No. 29,093; _____; provided that if any one of said attorneys ceases being affiliated with the law firm of Flehr, Hobbach, Test, Albritton & Herbert as partner, employee or of counsel, such attorney's appointment as attorney and all powers derived therefrom shall terminate on the date such attorney ceases being so affiliated.

Direct all telephone calls to Willis E. Higgins at (415) 781-1989.

Address all correspondence to:
FLEHR, HONBACH, TEST,
ALBRITTON & HERBERT
Suite 3400, Four Embarcadero Center
San Francisco, California 94111

File No. A-50412/WEH

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18, United States Code, §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor: CHARLES H. MOORE
Inventor's signature: *Charles H. Moore*
Date: 1987 Aug 2
Residence: Woodside, California
Citizenship: U.S.A.
Post Office Address: 410 Star Hill Road
Woodside, CA 94062

Full name of second joint inventor, if any: RUSSELL H. FISH III
Inventor's signature: *Russell H. Fish III*
Date: 1987 Aug 2
Residence: 750 Shoreline Blvd., Mt. View, CA
Citizenship: U.S.A.
Post Office Address: 750 Shoreline Blvd., Ste. 85
Mountain View, CA 94043

DECLARATION AND POWER OF ATTORNEY
FOR PATENT APPLICATION

TPL000132

PATRIOT057794

EXHIBIT 4



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
077389,334	08/03/89	MOORE	C A50412WEH

EXAMINER

ENG, D

FLEHR, HOHBACH, TEST,
ALBRITTON & HERBERT
SUITE 3400
FOUR EMBARCADERO CENTER
SAN FRANCISCO, CA 94111

ART UNIT	PAPER NUMBER
2302	4

DATE MAILED: 08/31/92

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☒ Responsive to communication filed on 6/8/92 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 30 month(s), 30 days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1, 3, 6-13, 16-30 and 32-70 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 2, 4, 5, 14, 15 and 31 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☐ Claims _____ are rejected.
5. ☐ Claims _____ are objected to.
6. ☒ Claims 1, 3, 6-13, 16-30 & 32-70 are subject to restriction or election requirement.
7. ☐ This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable, ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner, ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved, ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Serial No. 389334

-2-

Art Unit 2302

15. Claims 2, 4, 5, 14, 15 and 31 have been cancelled. The active claims are 1, 3, 6-13, 16-30 and 32-70.

16. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1 and 2, drawn to microprocessor system having a multiplex bus, classified in Class 395, subclass 325.

II. Claims 3, 6-11, 26-30 and 32-47, drawn to a processor system having means for fetching multiple instructions in parallel during a single machine cycle, classified in Class 395, subclass 775.

17. III. Claim 13, drawn to a microprocessor system having a DMA for fetching instruction for a CPU and itself, classified in Class 395, subclass 725.

18. IV. Claims 16-18 and 63-64, drawn to a processing system configured to provide different memory access time for different amounts of memory, classified in Class 395, subclass 425.

19. V. Claims, 19-21 and 65-67, drawn to method and apparatus which operates at a variable clock speed, classified in Class 395, subclass 550.

20. VI. Claims 22-23, drawn to a CPU having stacks and pointers, classified in Class 395, subclass 800.

21. VII. Claims 24-25 and 69-70, drawn to a processing system for processing polynomial instruction, classified in Class 395, subclass 800.

Serial No. 389334

-3-

Art Unit 2302

22. VIII. Claims 48-57, drawn to a microprocessor architecture, classified in Class 395, subclass 800.

23. IX. Claims 58-62, drawn to method for prefetching, classified in Class 395, subclass 375.

24. X. , Claim 68, drawn to method for operating a stack, classified in Class 395, subclass 800.

25. The inventions are distinct, each from the other because of the following reasons:

26. Inventions I to IX and X are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations. (M.P.E.P. § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination (claim 26, AB_{br}) as claimed does not set forth the details [the multiplex bus in claim 12, the DMA in claim 13, the variable access time memory in claim 16, the variable clock speed in claim 19, the stack in claim 22, the polynomial instruction processor in claim 24, the microprocessor architecture in claim 48, the prefetching in claim 58 and the method for operating a stock in claim 68, B_{sp}] of the subcombination as separately claimed. The subcombination has separate utility such as each of

Serial No. 389334

-4-

Art Unit 2302

the inventions do not require the other inventions for operation.

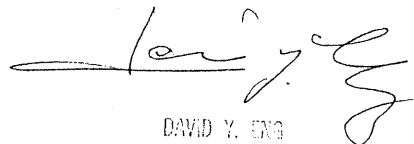
27. Because these inventions are distinct for the reasons given above and the search required for each of the inventions is not required for each other groups restriction for examination purposes as indicated is proper.

28. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.

29. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Any inquiry concerning this communication should be directed to Examiner David Eng at telephone number (703) 308-0754. 1635

DE/ss
August 21, 1992



DAVID Y. ENG
PRIMARY EXAMINER
ART UNIT 232

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the paper.

EXHIBIT 5

**FLFHR
HOHBACH
TEST
ALBRITTON
& HERBERT**

September 11, 1992

Patent, Trademark & Copyright Law

Mr. Helmut Falk
Nanotronics
1897 Crow Foot Road
Eagle Point, Oregon 97524

4 Embarcadero Center
Suite 3400
San Francisco, CA
94111-4187

Re: Patent Application for
HIGH PERFORMANCE, LOW COST MICROPROCESSOR
Our File: A-50412/WEH

(415) 781-1989 Dear Helmut:

850 Hansen Way
Suite 200
Palo Alto, CA 94304-1017
(415) 494-6700

Harold C. Hohbach
Aldo J. Test
Thomas O. Herbert
Donald N. MacIntosh
Jerry G. Wright
Edward S. Wright
David J. Brezner
Richard E. Backus
James A. Sheridan
Robert B. Chickering
Gary S. Williams
Willis E. Higgins
Richard F. Trecartin
Richard P. Doyle, Jr.
C. Michael Zimmerman
Walter H. Dreger
Karen S. Smith
Paula N. Chavez
William S. Galliani
Laura L. Kulhanjian
Michael A. Kaufman
Michael L. Louie
Gregory C. Thaver
Janet E. Muller
Stuart P. Kaler
Kevin J. Zimmer
Edward N. Bachand

OF COUNSEL
Edward B. Gregg, P.C.
Julian Caplan
Bertram I. Rowland

Paul D. Flehr
(1898-1992)
Elmer S. Albritton
(1922-1988)

San Francisco
Cable: FLEHRSF
Telex: 910 277299
FHT UR
Telecopier: (415) 398-3249

Palo Alto
Telecopier: (415) 494-8771

We have received a second Office Action on the above application, a copy of which is enclosed. This is not an action on the merits of the application. After examining all of the claims in the first action, the Examiner now says that there are 10 different inventions in the application, and we must pick one for prosecution in this application. Apparently, we gave the Examiner something to think about in our response to the first action. You therefore have a prospect of getting up to 10 patents from this and successor applications.

We do not have to prosecute all of these inventions at once. We can file successive applications directed to the inventions one at a time until all of them have been prosecuted. We can also dispute that some or all of the inventions are in fact different, but doing so is rarely successful. Since the life of a patent is 17 years from the issue date, we can lengthen the time you will have an issued patent covering your product by prosecuting the inventions serially. Since each invention will probably take close to two years to prosecute on average, this would lengthen your coverage substantially.

Assuming we want to prosecute the inventions serially, we should therefore save those directed to important concepts that are likely to be used in successor products for many years for later prosecution. If there are important features that are likely to be used for only a few years, we should prosecute them earlier. If there are features that will only be used for a short time and which will have to be used by a competitor who wants to duplicate the functionality of your chip, they should be prosecuted first. I have discussed this matter with Russel Fish, and he will provide me with his list prioritizing the 10 inventions, both by importance and time order.

Dividing up the claims into these ten inventions does raise the issue of inventorship. If an invention we select for prosecution is not a joint invention of both named inventors, we will have to change the inventorship on the application in which it is prosecuted to name only the sole inventor. Any invention on which Russel Fish is the sole inventor you own outright. Any invention on which Chuck Moore is the sole inventor he owns outright. Any joint invention is jointly owned. However, you have the right to practice any of the inventions as a result of the royalty bearing agreement between Russel Fish and Chuck Moore. Chuck Moore also has that right under the agreement, also subject to the same royalty. Russel Fish will also provide us with his identification of inventorship for the 10 features. By copy of this letter, I am asking Chuck Moore to do the same. Russel believes that there would not be any significant disagreement in those lists. If there is disagreement, then we would need

PATRIOT 027948

Mr. Helmut Falk
September 11, 1992
Page 2

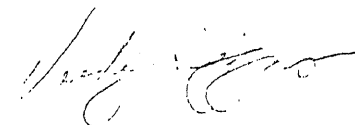
to have a meeting or otherwise resolve the disagreement. If we cannot obtain Chuck Moore's cooperation, we will simply have to do the best we can to assign the inventorship without his inputs. However, it is in his interest as well as yours to do the inventorship determination as accurately as possible.

A response to this Office Action is due within thirty days of its date, i.e., on or before September 30, 1992. However, it can be filed anytime before then. The due date can also be extended by up to four months, i.e., up to January 30, 1993, by paying an extension of time fee with the response.

Please let me have your thoughts after you have reviewed this Office Action. Please feel free to call if you have any questions, comments or further instructions.

Very truly yours,

FLEHR, HOHBACH, TEST
ALBRITTON & HERBERT



Willis E. Higgins

WEH:mb
Enclosure
cc: Mr. Russel Fish III, with Enclosure
Mr. Chuck Moore, with Enclosure

EXHIBIT 6

TO: WOODY HIGGINS
CC: HELMUT
FROM: RUSSELL FISH
DATE: SEPTEMBER 12, 1992

SUBJECT: ShBoom Patents

GENERAL

The patent office has split our one ShBoom patent claim into the following:

1. Triple bus multiplexing.
2. Multiple instruction fetch.
3. DMA coprocessor.
4. Automatic sensing of number of memory chips.
5. Fish Clock.
6. Merged stack/register architecture.
7. Automatic polynomial generation.
8. "ShBop" monolithic CPU & DRAM.
9. Method for prefetching.
10. Stack caching.

One possible ramification of ten separate patents is that each of these ten ideas had a single inventor. To the best of my recollection 1,2,5,6,& 8 were mine, and 3,4,7,9, & 10 were Chuck's. #10 did have significant input from me. If you ask him, I believe you will get the same answer on all 10.

In my estimation, 1,2,5,6,& 8 are also the most useful and valuable potential patents.

The prototype chip used Moore's patent #3 for the coprocessor. The new chip uses my coprocessor/DMA design which takes a different approach and achieves superior results.

Moore #4 is a neat idea, but not essential.

Moore #7 was not implemented in the prototype nor in the current chip.

Moore #9 has been modified in the current chip and the patent is probably not essential to ShBoom.

Moore #10 was not implemented in the prototype and the current chip uses a different technique jointly invented by Shaw, McClurg, and myself.

ANALYSIS OF SIGNIFICANCE

ShBoom gets its speed from #2 and #6. Multiple instruction fetch gets around the Von Neumann bottleneck. Merged register/stack architecture allows single cycle math and logic operations without a pipeline.

You cannot build ShBoom or anything like it without these

two patents. These two patents are complimentary and increase the speed of ShBoom by from two to three over a similar computer which doesn't use these techniques.

#1 is a cost reduction and power reduction idea. By sharing pins, wires, and drivers three ways, power consumption is reduced by two thirds, chip area is reduced by 50%, and package cost is reduced by 70%.

Without #1 you can make a part which runs as fast as ShBoom, but it will cost three to four times as much and burn three times the power.

#5 and #8 work together and are the key patents necessary to build a fast cheap merged CPU/DRAM. The Fish Clock enables performance optimization which is only possible when memory and CPU reside on the same piece of silicon. Neither of these is used in the current ShBoom.

PRIORITY

#2, multiple instruction fetch, is the key patent. I suggest that we prosecute it first. From a competitive standpoint it is a SPARC killer.

#6 is important but less likely to be copied since it goes against the prevailing wisdom of computer architects. Very few computer architects (outside of Burroughs/Unysis) understand the implications of an arithmetic stack. No microprocessor architects have given it a second thought. I would prosecute it next.

#1 is important for building a cheap ShBoom, but it is only significant if you have #2 and #6. And if you have #2 and #6 you probably don't need #1. #1 is potentially important when combined with a memory architecture I designed for Alliance (but still own the rights to). I would do #1 next.

#5 and #8 are only significant if we ever decide to build or license a CPU/DRAM which uses the techniques. I suggest we prosecute these last.

THE MOORE PATENTS

When we were defining the original ShBoom architecture, Moore was focused on designing a theoretical machine. I was focused on making and selling damn fast, dirt cheap chips. For this reason, my ideas are probably the more commercially valuable.

All of the Moore patents are either not used in the current chip (#3, #4, #7, & 10), are a mathematical curiosity (#7), have been superseded (#3 & #10), or can be easily designed out if necessary (#9).

In the interest of economy, we might even leave it to Chuck to prosecute his own patents. He also might accept and even be happier with this arrangement.

EXHIBIT 7

**FLEHR
HOHBACH
TEST
BRITTON
& HERBERT**

September 30, 1992

Patent, Trademark & Copyright Law

Mr. Helmut Falk
Nanotronics
1897 Crow Foot Road
Eagle Point, Oregon 97524

4 Embarcadero Center
Suite 3400
San Francisco, CA
94111-4187

Re: Patent Application for HIGH PERFORMANCE,
LOW COST MICROPROCESSOR
Our File A-50412/WEH

(415) 781-1989

Dear Helmut:

850 Hansen Way
Suite 200
Palo Alto, CA 94304-1017
(415) 494-8700

Harold C. Hohbach
Aldo J. Test
Thomas O. Herbert
Donald N. MacIntosh
Jerry G. Wright
Edward S. Wright
David J. Brezner
Richard E. Backus
James A. Sheridan
Robert B. Chickering
Gary S. Williams
Willis E. Higgins
Richard F. Trecartin
Richard P. Doyle, Jr.
C. Michael Zimmerman
Walter H. Dreger
Karen S. Smith
William S. Galliani
Laura L. Kulhanjian
Michael A. Kaufman
Michael L. Louie
Gregory C. Thayer
Janet E. Muller
Stuart P. Kaler
Kevin J. Zimmer
Edward N. Bachand

OF COUNSEL
Edward B. Gregg, P.C.
Julian Caplan
Bertram I. Rowland
Steven F. Caserza

Paul D. Flehr
(1898-1992)
Elmer S. Albritton
(1922-1988)

San Francisco
Cable: FLEHRSE
Telex: 910 277299
FHT UR
Telecopier: (415) 398-3249


Palo Alto
Telecopier: (415) 494-8771

Enclosed is a copy of our response to the restriction requirement in the above-identified application. You will note that we elected Group II for prosecution, which is directed to fetching multiple instructions in parallel during a single machine cycle, based on Russell Fish's recommendation.

As you can tell from my comments in the response, this group contains dependent claims directed to the features of the other groups. For this reason, a change in inventorship does not appear to be necessary for this application. While we have argued that the claims should all be examined together, there is almost no chance that the Examiner will accept that argument. We may have to change inventorship when we file divisional applications on the other groups, many of which are not tied together with dependent claims in the same manner as Group II. We will let you know when we hear further from the Patent and Trademark Office.

Very truly yours,

FLEHR, HOHBACH, TEST,
ALBRITTON & HERBERT


Willis E. Higgins

WEH:mb

Encl.

cc: Russell Fish
Charles Moore

EXHIBIT 8

CONSULTANT SERVICES AGREEMENT

THIS AGREEMENT between Willis E. Higgins and Patriot Scientific Inc., a California Corporation ("PTSC"), is made as of May 30, 2003.

WHEREFORE, PTSC has several patents for central processing units for computers, specifically U.S. Patents 5,440,749; 5,530,890; 5,604,915; 5,659,703; 5,784,584; and 5,809,336; and any patent or patent application anywhere claiming priority from U.S. Patent Application Serial No. 389334, filed August 3, 1989, and all patents issuing from it anywhere, and any patent or patent application anywhere claiming priority from U.S. Patent Application Serial No. 60/005,408, filed October 6, 1995, including PCT Application WO 97/15001, filed October 4, 1996, and all patents issuing from it anywhere (collectively, "Patents"); and

WHEREFORE, PTSC desires to engage Higgins as a consultant to provide opinions, reports, materials, and advice as a consultant on its Patents; and Higgins is willing to provide those services.

NOW, THEREFORE, the parties agree as follows:

1. Higgins's duties and responsibilities shall include the ordinary duties, responsibilities and work of a consultant in any patent litigation and related matters as they are requested or approved by PTSC or its counsel.
2. PTSC shall pay Higgins \$410 per hour for work rendered under this Agreement.
3. Higgins shall bill monthly for fees and expenses (facsimiles, postage, reproduction and binding, telecommunications, word processing, computerized research, express mail service, local travel, meals, out-of-town travel).

4. PTSC agrees to maintain in the trust account of Beatie and Osborn LLP the sum of \$4,000, as a running retainer, replenished on a monthly basis as needed, against which remittance for Higgins's fees will be drawn. From time to time, when it is anticipated by Higgins and Beatie and Osborn that a particular month will involve substantially more time and expense commitment than would be covered by the above running retainer, Higgins and Beatie and Osborn will so notify PTSC and request additional payment to the trust account to cover such time and expense commitment.

5. Higgins will submit invoices directly to Beatie and Osborn LLP for remittance. Higgins will be paid within thirty days of receipt of his invoice. If payment is not made within thirty days, a service charge of one percent per month will be incurred for the balance due.

6. The results of Higgins's work for PTSC, including all opinions, reports, analyses, and other work, shall belong to PTSC.

7. Higgins will not disclose these results to others during or following the term of this Agreement without the written consent of PTSC.

8. While this Agreement is in effect, Higgins will not accept employment with any competitor of PTSC without the consent of PTSC in writing.

9. Higgins represents and warrants that no existing contract or obligation inconsistent with this Agreement exists.

10. Either party may terminate this Agreement at any time, provided that no termination shall deprive Higgins of the accrued fees, costs, and disbursements earned under this Agreement prior to its termination.


11. Termination shall be by telephone, and in writing by facsimile and ordinary mail.

12. This Agreement shall be terminated by the death or incapacity of Higgins, but paragraphs 6 and 7 shall continue.

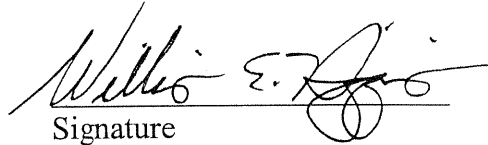
13. This Agreement and related matters not specifically covered by this Agreement shall be governed by the laws of the State of Maine, disputes shall be resolved in the federal or state courts of the State of Maine, and the parties consent to jurisdiction and venue in the State of Maine.

PTSC:

WILLIS E. HIGGINS:



Signature



Signature

CEO

Title

55 HIGH STREET (P.O. Box 720)

Street Address

BROWNVILLE, ME 04414

City State Zip