FORM PTO-1595 (Rev. 6/93)



U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

SHEET

Attorney Docket No. 1340-1-021CIP

To the Assistant Commissioner for Patents. Please re	cord the attached original documents or copy thereof.
1. Name of conveying party(ies):	2. Name and address of receiving party(ies):
Hiromitsu Nakauchi []-14-66	Name: St. Jude Children's Research Hospital
Additional name(s) of conveying party(jes) attached? [1 Yes IX1 No  3. Nature of conveyance:  [X] Assignment [] Merger [] Security Agreement [] Change of Name  Other:	Address: 332 North Lauderdale Street  Memphis, TN 38105-2794  Additional name(s) & address(es) attached? [] Yes [X] No
Execution Date: September 26, 2000	
<ol> <li>Application number(s) or patent number(s):</li> <li>If this document is being filed together with a new application, the</li> <li>A. Patent Application No.(s)</li> <li>09/584,586</li> </ol>	e execution date of the application is:  B. Patent No.(s)
Additional numbers attack	ned? [] Yes [X] No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: David A. Jackson  Address: KLAUBER & JACKSON  411 Hackensack Avenue, 4th Floor	7. Total fee (37 CFR 3.41): \$40.00  [X] Enclosed  [] Authorized to be charged to deposit account, if necessary -
Hackensack, New Jersey 07601	for overages or underpayments only  8. Deposit account number:  11-1153  (Attach duplicate copy of this page if paying by deposit account)
DO NOT USE	THIS SPACE
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true as Michael D. Davis, Reg. No. 39,161  Name of Person Signing	Total number of pages including cover sheet, attachments, and document: 4

Mail documents to be recorded with required cover sheet information to:

Assistant Commissioner For Patents Box Assignments Washington, D.C. 20231

12/05/2000 MTHAI1

01 FC:581

00000271 09584586

40.00 DP

## ASSIGNMENT

WHEREAS, WE,

Brian Sorrentino, a citizen of the United States, residing at 6590 Quail Point Circle North
Memphis, TN 38103; and

Kevin Bunting, a citizen of the United States, residing at 99 North Main #1112
Memphis, TN 38120;

John Schuetz, a citizen of the United States, residing at 1442 Carr Avenue
Memphis, TN 38105; and

Hiromitsu Nakauchi, a citizen of the United States, residing at

- Department of Immunology -

- Inst. of Basic Med. Sciences

- University of Tsukuba

- Tsukuba, Ibaraki 305

· JAPAN

429-3 Oi, Kukizaki-machi Inashiki-gun, Ibaraki,

JAPAN 300-1243

H.N.

have invented certain new and useful improvements in

RELATIONSHIP OF ABC TRANSPORT PROTEINS WITH HEMATOPOIETIC STEM CELLS AND METHODS OF USE THEREOF

for which we have filed an Application for Letters Patent in the United States on May 31, 2000, and was accorded U.S. Serial No. 09/584,586; and

WHEREAS.

S, ST. JUDE CHILDREN'S RESEARCH HOSPITAL, an education corporation organized and existing under the laws of the State of Tennessee, with office at 332 North Lauderdale Street, Memphis, TN 38105-2794,

ASSIGNEE, is desirous of obtaining the entire right, title and interest in, to and under the said improvements and the said application;

NOW, THEREFORE, for other good and valuable consideration, the receipt of which is hereby acknowledged, we the said

Brian Sorrentino; Kevin Bunting; John Schuetz; and Hiromitsu Nakauchi

have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to the said

ST. JUDE CHILDREN'S RESEARCH HOSPITAL,



its successors, legal representatives and assigns, the entire right, title and interest in, to and under the said improvements, and the said application and all divisions, renewals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, including the right to claim priority under the terms of any appropriate International Convention based upon said application for Letters Patent of the United States, and all Letters Patent which may be granted from said improvements in any country or countries foreign to the United States and extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States, whose duty is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said

## ST. JUDE CHILDREN'S RESEARCH HOSPITAL,

it successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the interest herein assigned in the manner hereinabove set forth, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said

## ST. JUDE CHILDREN'S RESEARCH HOSPITAL,

its successors, legal representatives and assigns, any fact known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisions, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said

## ST. JUDE CHILDREN'S RESEARCH HOSPITAL,

its successors, legal representatives and assigns, to obtain and enforce proper Patent Protection for said improvements in the United States.

IN TESTIMONY WHEREOF, we hereunto set our hand and seal the day and year set opposite our signatures.

- 2 -

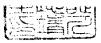
Date	, 2000	L.	S.
		Brian Sorrentino	
State of	: : ss.		
County of	:		
	the person who is de ledged to me that he	o), personally appeared Brian Sorrentino, to me escribed in and who executed the above /she executed the same of his/her own free will	
		NOTARY PUBLIC	
(Affix Seal Here)			
Date	, 2000	Kevin Bunting L.	.S.
State of			
State of	: ss.		
County of	:		
personally known to be	the person who is do ledged to me that he	O, personally appeared Kevin Bunting, to me escribed in and who executed the above s/she executed the same of his/her own free will	
		NOTARY PUBLIC	

Date	, 2000	L.S.
	,	John Schuetz
State of	:	
County of	: ss. :	
Before me this personally known to be instrument, and acknow for the purposes therein	ledged to me t	2000, personally appeared John Schuetz, to me o is described in and who executed the above hat he/she executed the same of his/her own free will
		NOTARY PUBLIC
(Affix Seal Here)		
Date Copt. 26	, 2000	Hiromitsu Nakauchi
State of	:	
County of	: ss. :	

Before me this 26th day of Sep. 2000, personally appeared Hiromitsu Nakauchi, to me personally known to be the person who is described in and who executed the above instrument, and acknowledged to me that he/she executed the same of his/her own free will for the purposes therein set forth.

Haswo Cye chi Lin

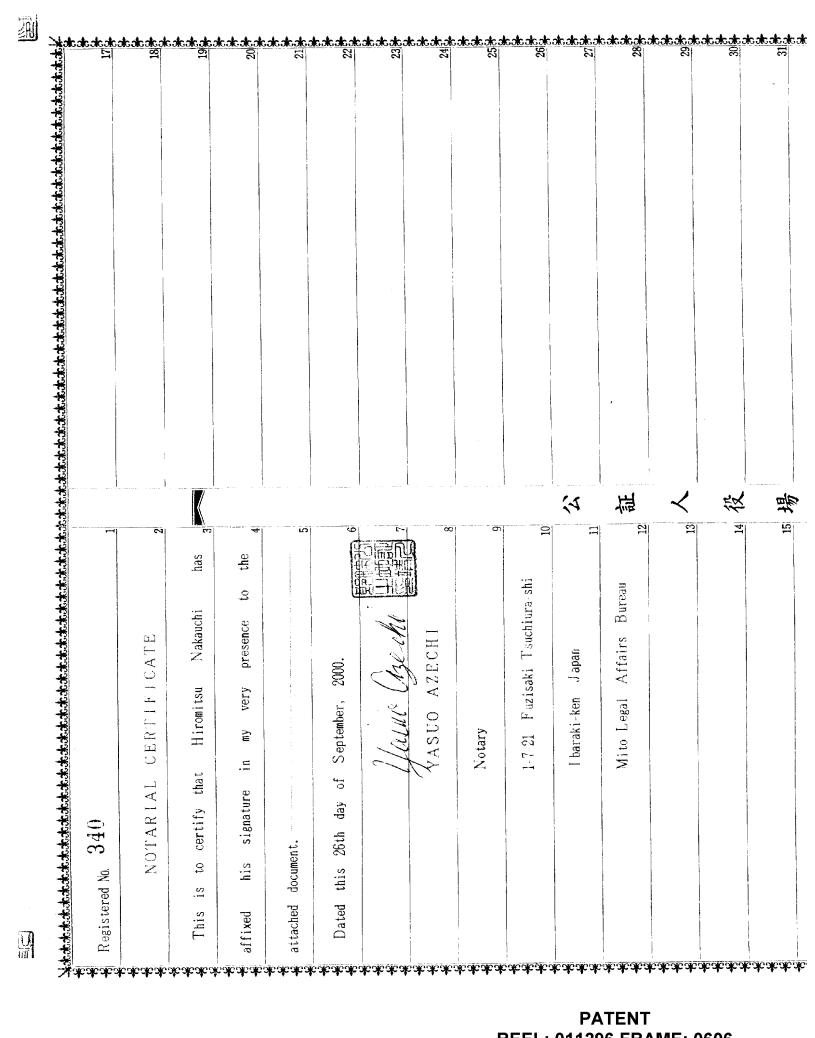
(Affix Seal Here)

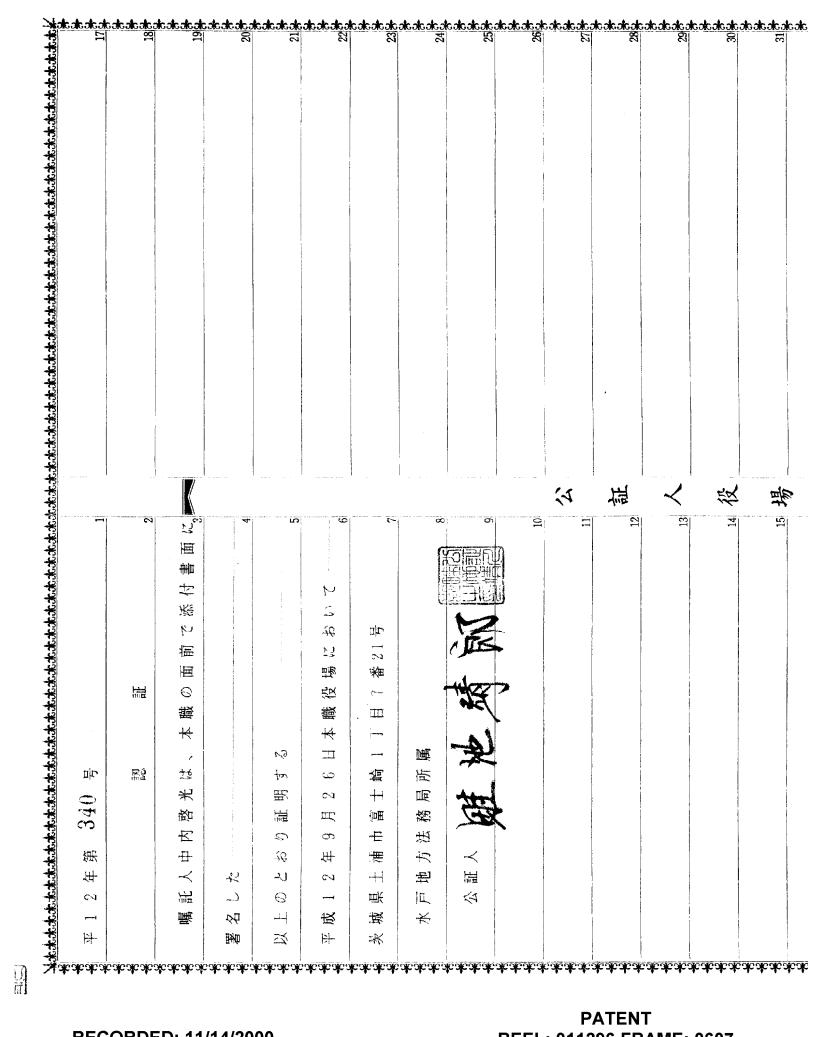




Registe	ered No.	340	
	Ν	OTARIAL CERTIFICATE	
This	is to	certify that Hiromitsu Nakauchi I	nas
affixed	his	signature in my very presence to t	the
attached	l docum	ent.	-
Dated	l this	26th day of September, 2000.	1715
		Hasur azechi	
		YASUO AZECHI	
		Notary	
		1-7-21 Fuzisaki Tsuchiura-shi	1
		I baraki ken Japan	1
		Mito Legal Affairs Bureau	
			-
			-
			× deligi

**REEL: 011296 FRAME: 0605** 





**RECORDED: 11/14/2000**