# RECORD#

01-02-2002 101928854

Application Number	09/956,279	
Confirmation Number	2321	
Filing Date	September 17, 2001	
First Named Inventor	Weissman et al.	
Examiner	Not yet assigned	
Group Art	1644	
Attorney Docket No.	STAN126CIP	

12/17/01

ADDRESS TO:	Commissioner of Patents and T Box Assignment Washington, D.C. 20231	rademarks	
To the Honorable Com	missioner of Patents and Trademarks: Please	e record the attached original documents or copy thereof.	
•	n, Markus Gabriel Manz er, Toshihiro Miyamoto	Name and address of receiving party(ies):      Name: The Board of Trustees of the Leland     Stanford Jr. University	
Additional name(s) of conveying party(ies) attached?  Yes  No		Suite 350 Internal Address:	
3. Nature of conveya  ✓ Assignment  ✓ Security Agree  ✓ Other:  Execution Date(s):	☐ Merger	Street Address: 900 Welch Road  City: Palo Alto State: CA Zip: 94304  Additional name(s) & address(es) attached?  No	
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is:			
A. Patent Applicat 09/956,279	ion Number(s):	B. Patent Number(s): DEC 2 200	
5. Name and addres concerning documer	s of party to whom correspondence nt should be mailed:	6. Total number of applications and patents involved:	
Name: Pamela J. Street Address:	Sherwood, Ph.D. BOZICEVIC, FIELD & FRANCIS, LLP 200 Middlefield Road, Suite 200 Menlo Park, CA 94025	7. Total fee (37 CFR 3.41): \$40.00  Enclosed  Authorized to be charged to deposit account A Cuplicate Copy of this Sheet is Attached	
	Telephone: (650) 327-3400 Facsimile: (650) 327-3231	8. The Commissioner is authorized to charge any fees which may be required, or credit any overpayment to Deposit Account 50-0815 order No. STAN-126CIP. If additional fees are required, including extensions of time, please consider this a petition therefore.	
DO NOT USE THIS SPACE			
9. Statement and Signature.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.			
Pamela J. Sherwo		) hc4 l/77/ 12-21-2001 Signature Date	
Name of Pers		Olgipalio	

12/31/2001 LMUELLER 00000148 500815 0995627

01 FC:581

40.00 CH

PATENT REEL: 012398 FRAME: 0544

#### STAN126CIP Attorney Docket Number ASSIGNMENT OF APPLICATION (JOINT) First Named Inventor Weissman et al. Address to: Application Number 09/956,279 Box Assignment September 17, 2001 Filing Date Commissioner for Patents Group Art Unit 1644 Washington, D.C. 20231 Examiner Name Unassigned Title: Mammalian Mycloid Progenitor Call Subsets

TIIIS ASSIGNMENT, by and (hereinafter referred to as the assignors), Irving L. Weissman. David Jeffrey Traver, Koichi Akashi, Markus Gabriel Manz and Toshihiro Miyamoto, respectively, witnesseth:

WHERRAS, the said assignors have invented certain new and useful improvements in:

## MAMMALIAN MYELOID PROGENITOR CELL SUBSETS

[X] for which an application for a United States Patent was filed on September 17, 2001. Application No. 09/956,279.

WHEREAS. The Board of Trustees of the Leland Stanford Ir. University, a non-profit organization organized under the laws of California, and having its principle place of business at Palo Alto, California (hereinafter referred to as the assignce) is desirous of acquiring the entire right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patents, United States or foreign, to be obtained therefor and thereon:

NOW TIDEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient considerations, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, and the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned invention, application for Letters Patent, and any and all Letters Patents or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be hold and enjoyed by said assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above-mentioned, and that the same are unconcumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is fawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any release or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be issued thereon for the sole use and behalf of said assignee, its successors, legal representatives and assigns.

Pale	Signature: Name of Inventor	Itving L. Weissman
Date	Signature:	Parid leffers Troug
_	Name of Inventor	David Jeffrey Traver
Date 12/18/01	Signature: Name of Inventor	Koichi Akashi
_		
Date	Signature: Name of Inventor	Markus Gabriel Manz
Date	Signatures	
	Name of Inventor	Toshihiro Miyamoto

## Attorney Docket Number STAN126CIP ASSIGNMENT OF APPLICATION (JOINT) First Named Inventor Weissman et al. Address to: Application Number 09/956,279 Box Assignment Filing Date September 17, 2001 Commissioner for Patents Group Art Unit 1644 Washington, D.C. 20231 **Examiner Name** Unassigned Title: Mammalian Myeloid Progenitor Cell Subsets THIS ASSIGNMENT, by and (hereinafter referred to as the assignors), Irving L. Weissman, David Jeffrey Traver, Koichi Akashi, Markus Gabriel Manz and Toshihiro Miyamoto, respectively, witnesseth: WHEREAS, the said assignors have invented certain new and useful improvements in: MAMMALIAN MYELOID PROGENITOR CELL SUBSETS for which an application for a United States Patent was filed on September 17, 2001, Application No. 09/956,279. X WHEREAS, The Board of Trustees of the Leland Stanford Jr. University, a non-profit organization organized under the laws of California, and having its principle place of business at Palo Alto, California (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon: NOW THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient considerations, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned invention, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made. AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth. AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be issued thereon for the sole use and behalf of said assignee, its successors, legal representatives and assigns.

Date	Signature: Name of Inventor	Irving L. Weissman
Date	Signature: Name of Inventor	David Jeffrey Traver
Date	Signature: Name of Inventor	Koichi Akashi
Date	Signature: Name of Inventor	Markus Gabriel Manz
Date [2/04/0]	Signature: Name of Inventor	Joshihiro Miyamoto

F:\DOCUMENT\STAN (Stanford)\126CIP\Assignment Stanford (joint).doc

#### Attorney Docket Number STAN126CIP ASSIGNMENT OF APPLICATION (JOINT) First Named Inventor Weissman et al. Address to: Application Number 09/956.279 Box Assignment Filing Date September 17, 2001 Commissioner for Patents Group Art Unit 1644 Washington, D.C. 20231 **Examiner Name** Unassigned Title: Mammalian Myeloid Progenitor Cell Subsets THIS ASSIGNMENT, by and (hereinafter referred to as the assignors), Irving L. Weissman, David Jeffrey Traver, Koichi Akashi, Markus

Gabriel Manz and Toshihiro Miyamoto, respectively, witnesseth:

WHEREAS, the said assignors have invented certain new and useful improvements in:

#### MAMMALIAN MYELOID PROGENITOR CELL SUBSETS

for which an application for a United States Patent was filed on September 17, 2001, Application No. 09/956,279. X

WHEREAS, The Board of Trustees of the Leland Stanford Jr. University, a non-profit organization organized under the laws of California, and having its principle place of business at Palo Alto, California (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said invention and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient considerations, the receipt of which is hereby acknowledged, said assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned invention, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by said assignee, for its own use and behalf and the use and behalf of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, said assignors are the sole and lawful owners of the entire right, title and interest in and to said invention and the application for Letters Patent above-mentioned, and that the same are unencumbered and that said assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal representatives and assigns, that said assignors will, whenever counsel of said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said invention in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.

AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be issued thereon for the sole use and behalf of said assignee, its successors, legal representatives and assigns.

Name of Inventor Irving L. Weissman  Signature:	
Name of Inventor David Jeffrey Tyaver	
Date Signature:	
Name of Inventor Koichi Akashi	
Date Signature:	
Name of Inventor Markus Gabriel Manz	
Date Signature:	
Name of Inventor Toshihiro Miyamoto	

F:\DOCUMENT\STAN (Stanford)\126CIP\Assignment Stanford (joint).doc

	· · · · · · · · · · · · · · · · · · ·		
ASSIGNMENT OF APPLICATION (JOINT)	Attorney Docket Number	STAN126CIP	
	First Named Inventor	Weissman et al.	
Address to:	Application Number	09/956,279	
Box Assignment Commissioner for Patents	Filing Date	September 17, 2001	
Washington, D.C. 20231	Group Art Unit	1644	
	Examiner Name	Unassigned	
	Title: Mammalian Myeloid	Progenitor Cell Subsets	
THIS ASSIGNMENT, by and (hereinafter referred to as the assignors), Irving L. Weissman, David Jeffrey Traver, Koichi Akashi, Markus Gabriel Manz and Toshihiro Miyamoto, respectively, witnesseth:			
WHEREAS, the said assignors have invented	certain new and useful improvemen	ats in:	
MAMMALIAN MYELOID PROGENITO	R CELL SUBSETS		
X for which an application for a Unite	d States Patent was filed on Septemi	ber 17, 2001, Application No. 09/956,279.	
California, and having its principle place of business at the entire right, title and interest in and to said invention. Letters Patent or Patents, United States or foreign, to be NOW THEREFORE, in consideration of One hereby acknowledged, said assignors have sold, assigne over, unto the assignee, its successors, legal representation invention, application for Letters Patent, and any and all which may be granted therefor and thereon, and in and to reissues or extensions of said Letters Patent or Patent Property, the same to be held and enjoyed by said assign representatives and assigns, to the full end of the term of the same would have been held and enjoyed by the assign AND for the same consideration, said assignor representatives and assigns, that, at the time of execution entire right, title and interest in and to said invention and unencumbered and that said assignors have good and fulforth.  AND for the same consideration, said assignor representatives and assigns, that said assignors will, whe and assigns, shall advise that any proceeding in connect connection with Letters Patent for said invention in any division, continuation or continuation-in-part of any approbatined thereon, is lawful and desirable, sign all papers done for the procurement, maintenance, enforcement an successors, legal representatives and assigns, but at the	Palo Alto, California (hereinafter refar and said application for Letters Pata obtained therefor and thereon: Dollar (\$1.00) and other good and sid, transferred and set over, and by the letters Patent or Patents in the United and all divisions, continuations, and all rights under the Internation are, for its own use and behalf and the terms for which Letters Patent or Patents or Patents for which Letters Patent or Patents, had this sale and assignment may hereby covenant and agree to and and delivery of these presents, said the application for Letters Patent all right and lawful authority to sell at the said invention, or said application for Letters Patent or any reis and documents, take all lawful oath defense of Letters Patent for said it cost and expense of said assignee, its aissioner of Patents to issue said Letters said Letters and the said invents to issue said Letters said and expense of said assignee, its aissioner of Patents to issue said Letters said Let	sufficient considerations, the receipt of which is nese presents do sell, assign, transfer and set e and interest in and to the above-mentioned ited States of America and all foreign countries has, and continuations-in-part of said application, and Convention for the Protection of Industrial the use and behalf of its successors, legal fattents may be granted, as fully and entirely as not been made.  With said assignee, its successors, legal diassignors are the sole and lawful owners of the thove-mentioned, and that the same are rad convey the same in the manner herein set with said assignee, its successors, legal the counsel of its successors, legal representatives it is a successor of the diagraphic of the same and desirable, or that any issue or extension of any Letters Patent, to be as, and do all acts necessary or required to be invention, without charge to said assignee, its successors, legal representatives and assigns.	
Date Signature: Name of Inventor	or Irving L. Weissman		
Date Signature:  Name of Inventor	David Jeffrey Traver	<u></u>	
Date Signature: Name of Inventor	or Koichi Akashi		
Date 12 05 05 Name of Inventor	or Markus Gabriel Manz	20.15	

Toshihiro Miyamoto

F:\DOCUMENT\STAN (Stanford)\126CIP\Assignment Stanford (joint).doc

Signature:

Name of Inventor

	Application Number	09/956,279	
	Confirmation Number		
	Filing Date	September 17, 2001	
ASSIGNMENT OF APPLICATION (JOINT)	First Named Inventor	Weissman et al.	
	Examiner		
	Group Art		
	Attorney Docket No.	STAN126CIP	
Box Assignment			
ADDRESS TO: Commissioner for Patents Washington, D.C. 20231			
		(hereinafter referred to as the assignors),	
residing in Redwood City, California, West Roxbury, Massa		witnesseth:	
WHEREAS, the said assignors have invented certain new and use	•		
	PROGENITOR CELL SUBSETS		
for which an application for a United States Patent was filed on for which an application for a United States Patent was executed		, Application No. <u>09/956,279</u> , and	
1 for which an approach to a Office States Latent was executed		, allu	
WHEREAS The Board of Trustees of the Leland Stanford Junior University		•	
California and having its principle place of business at		50, Palo Alto, California 94043	
(hereinafter referred to as the assignee) is desirous of acquiring the application for Letters Patent of the United States, and in and to an			
obtained therefore and thereon:	ly Letters patent of Fatents, United	d States or foreign, to be	
NOW THEREFORE, in consideration of One Dollar (\$1.00)			
hereby acknowledged, said assignors have sold, assigned, transfer over, unto the assignee, its successors, legal representatives and as			
invention, application for Letters Patent, and any and all Letters Patent			
countries which may be granted therefor and thereon, and in and to			
said application, or reissues or extensions of said Letters Patent or			
Protection of Industrial Property, the same to be held and enjoyed its successors, legal representatives and assigns, to the full end of the successors of the successors of the successors.			
as fully and entirely as the same would have been held and enjoye			
been made.			
AND 6 at a second action and a sign and harden area		minum its surround tour	
AND for the same consideration, said assignors hereby coverepresentatives and assigns, that, at the time of execution and delive			
the entire right, title and interest in and to said invention and the ap	oplication for Letters Patent above	-mentioned, and that the same are	
unencumbered and that said assignors have good and full right and	l lawful authority to sell and conve	ey the same in the manner herein set	
forth.			
AND for the same consideration, said assignors hereby covenant and agree to and with said assignee, its successors, legal			
representatives and assigns, that said assignors will, whenever counsel of said assignce, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said invention, or said application for Letters Patent, or			
any proceeding in connection with Letters Patent for said invention			
desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of			
any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts			
necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said invention,			
without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of said assignee, its successors, legal representatives and assigns.			
AND said assignors hereby request the Commissioner of Patents to issue said Letters Patent of the United States to said assignee as the assignee of said invention and the Letters Patent to be issued thereon for the solejuse and behalf of said assignee, its successors,			
legal representatives and assigns.	1 / Sp PMh	,,	
Date 10/9/01 IRVING L. W	VEISSMAN WALLY INC		
Date DAVID JEFFI			
Date KOICHI AKA	VSHI		

RECORDED: 12/27/2001

PATENT REEL: 012398 FRAME: 0549