

9.12 W

	- I ANN HAN HAN EARD CLAN DAG		
	Form PTO-1595 6-93 1014651 PATEN	U.S. Department of Commerce Patent and Tracomark Office TS ONLY	
	To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.		
	Name of conveying party(ies):	2. Name and address of receiving party(ies):	
	Reinhard Ebner Guo-Liang Yu Steven M. Ruben Stephen Ullrich Yifan Zhai	Name: Human Genome Sciences, Inc. Street Address: 9410 Key West Avenue City: Rockville State: MD Zip Code: 20850	
	Additional name(s) of conveying party(ies) attached? □ yes ☑ no	Country: United States of America	
	3. Nature of Conveyance:	Additional name(s) & address(as) attached? to yes (a)	
	August 14, 2000, respetively		
	4. Application number(s) or patent number(s) If this document is being filed together with a new application.	on, the execution date of the application is	
	A. Patent Application No(s).	B. Patent No(s).	
	09/523,323		
	Additional numbers attached?	yes ⊠ no	
	Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved 1	
	Name: Sterne, Kessler, Goldstein & Fox P.L.1C.	7. Total fee (37 C.F.R. § 3.41) \$ 40.00	
	Internal Address: c/o Stephen G. Whiteside	⊠ Enclosed	
		☐ Authorized to be charged to Deposit Account	
	Street Address: 1100 New York Ave., N.W. Suite 600	8. Deposit Account Number: 19-0036	
	City: Washington State: D.C. Zip Code: 20005-3934		
09/19/2000 MT	HAI1 00000287 09523323 DO NOTUS	E THIS SPACE	
01 FC:581	9. Statement and signature.		
	To the best of my knowledge and belief, the foregoing information copy of the original document. Stephen G. Whiteside Name of Person Signing Registration No. 42,224	nation is true and correct and any attached copy is a true	
	OMB NO. 0651-0011 (exp.4/94)		
	Commissioner of Patents and	h required cover sheet information to: l Trademarks, Box Assignments n, D.C. 2023 l	

PAUSERS\STEPHENW\NHGS\1488.065\0000C\065-C.ASS\GN RECORD CVR \VED 017 pto SKGF Rev. 1/26/98 dew

In consideration of the sum of One Oollar (\$1.00) or equivalent and other good and valuable consiceration paid to each of the undersigned inventors: Reinhard EBNER, Guo-Liang YU, Steven M. RUBEN, Stephen ULLRICH, and Yifan ZHAI, the undersigned inventors hereby sell and assign to Human Genome Sciences, Inc. (the Assignee) his/her entire right, title and interest including the right to sue for past infringemen, and to collect for all past, present and future damages:

check applicable box(es) \(\text{ for the United States of America (as defined in 35 U.S.C. § 100), } \(\text{ and throughout the world, } \)

ly 9/6/w 36.658

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor s certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable:

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby gram Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688 Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala,

Page 1 of 2

Esquire, Registration No. 33,851; Michael B. Ray, Esquire. Registration No. 33,997. Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire. Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 30,588; all of STERNE, KESSLER, GOLDSTEIN & FON P. L.C., 1100 New York Avenue, N.W., Suite 600, Washington. D.C. 20005-3934, and Kenley K. Hoover, Esquire, Registration No. 40,302; James H. Davis, Esquire, Registration No. 40,582; Joseph J. Kenny, Registration No. 43,710; Michael M. Wales, Esquire, Registration No. 43,975; and Jonathan L. Klein, Esquire, Registration No. 41,119, of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland 20850, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Date. Znly 24, 2000	Signature of Inventor	Reinhard EBNER
Date:	Signature of Inventor	Gue-Liang YU
Date	Signature of Inventor _	Steven M. RUBEN
Date:	Signature of Inventor _	Stephen ULL RICH
Date.	Signature of inventor _	Vifan ZHAI

In consideration of the sum of One Pollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Reinhard EBNER, Guo-Liang YU, Steven M. RUBEN, Stephen ULLRICH, and Yifan ZHAI, the undersigned inventors hereby sell and assign to Human Genome Sciences, Inc. (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages

check applicable box(es)

✓ for the United States of America (as defined in 35 U.S.C. § 100),

✓ and throughout the world,

- (b) in any and all applications that craim the benefit of the patent application listed above in part (a), including continuing applications, reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor s certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable;

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest perein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant Robert Greene Sterne, Esquire, Registration No. 28,912; E.lward J. Kessler, Esquire, Registration No. 25,688. Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Escuond, Esquire, Registration No. 32,893; Tracy-Genc G. Durkar, Esquire, Registration No. 32,831; Michele A. Citubala,

36,6 ×8 1 9/6/00 Esquire, Registration No. 33,851; Michael B. Ray, Esquire. Registration No. 33,997; Robert E. Sokohl, Esquire. Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 39,588 all of STERNE, KESSLER, GOLDSTEIN & FON P. L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C 20005-3934, and Kenley K. Hoover, Esquire, Registration No. 40,302; James H. Davis, Esquire, Registration No. 40,582; Joseph J. Kenny, Registration No. 43,710; Michele M. Wales, Esquire, Registration No. 43,975; and Jonathan L. Klein, Esquire, Registration No. 41,119, of Human Genome Sciences, Inc., 9410 Key West Avenue. Rockville, Maryland 20850, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name

Date.		Signature of Inventor	
Date:	7/24/00	Signature of Inventor:	Reinhard FRNER
Date:			Steven M. RUBEN
Date:		Signature of Inventor.	Stephen ULLRICH
Date:		Signature of Inventor:	Yifan ZHAI

015.PTO Page 2 of 2 SKGI Rev. 3/31/00 near

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Reinhard EBNER, Guo-Liang YU, Steven M. RUBEN, Stephen ULLRICH, and Yifan ZHAI, the undersigned inventors hereby sell and assign to Human Genome Sciences, Inc. (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages

check applicable box(es)

✓ for the United States of America (as defined in 35 U.S.C. § 100).

✓ and throughout the world,

(a) in the invention(s) known as Apoptosis Inducing Molecule II and Methods of Use for which application(s) for patent in the United States of America has (have) been executed by the undersigned on \(\begin{align*} \frac{5}{2}/\sigma \circ \frac{4}{2} & \frac{7}{2}/\sigma \circ \frac{4}{2} & \frac{7}{2}/\sigma \circ \frac{4}{2} & \frac{7}{2}/\sigma \circ \frac{4}{2} & \frac{10}{2} & \frac{10}

EM 9/0,00 36,688

(b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications reissues, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and

(c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor s certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the international Agreement for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable.

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors, legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant Robert Greene Sterne, Esquire, Registration No. 28,912; Edward J. Kessler, Esquire, Registration No. 25,688; Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Est lond, Esquire, Registration No. 32,893; Tracy-Gene G. Durkin, Esquire, Registration No. 32,831; Michele A. Cimbala,

Page Lof 2

Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997. Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 39,588; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, and Kenley K. Hoover, Esquire, Registration No. 40,302; James H. Davis, Esquire, Registration No. 40,582; Joseph J. Kenny, Registration No. 43,710; Michael M. Wales, Esquire, Registration No. 43,975, and Jonathan L. Klein, Esquire, Registration No. 41,119, of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland 20850, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her mame.

Date:		Signature of Inventor	Reinhard EBNER
Date:		Signature of Inventor	Guo-Liang YU
Date:	8/20/a		Seven M. RUBEN
Date:	7/24/00	Signature o Inventor	Atyphen Werich Stephen ULLRICH
Date: _		Signature or inventor	Yifan ZHAI

In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned inventors: Reinhard EBNER, Guo-Liang YU, Steven M. RUBEN, Stephen ULLRICH, and Yifan ZHAI, the undersigned inventors hereby sell and assign to Human Genome Sciences, Inc. (the Assignee) his/her entire right, title and interest, including the right to sue for past infringement and to collect for all past, present and future damages

check applicable box(es)

✓ for the United States of America (as defined in 35 U.S.C. § 100),

✓ and throughout the world,

Ef 36,688

- (b) in any and all applications that claim the benefit of the patent application listed above in part (a), including continuing applications reissnes, extensions, renewals and reexaminations of the patent application or Letters Patent therefor listed above in part (a), to the full extent of the term or terms for which Letters Patents issue, and
- (c) in any and all inventions described in the patent application listed above in part (a), and in any and all forms of intellectual and industrial property protection derivable from such patent application, and that are derivable from any and all continuing applications, reissues, extensions, renewals and reexaminations of such patent application, including, without limitation, patents, applications, utility models, inventor s certificates, and designs together with the right to file applications therefor; and including the right to claim the same priority rights from any previously filed applications under the International Agreement for the Protection of Industrial Property, or any other international agreement, or the domestic laws of the country in which any such application is filed, as may be applicable:

all such rights, title and interest to be held and enjoyed by the above-named Assignee, its successors legal representatives and assigns to the same extent as all such rights, title and interest would have been held and enjoyed by the Assignor had this assignment and sale not been made.

The undersigned inventors agree to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such application(s) as the Assignee may deem necessary or expedient.

The undersigned inventors agree to execute all papers necessary in connection with any interference or patent enforcement action (judicial or otherwise) related to the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application(s) thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or patent enforcement action.

The undersigned inventors hereby represent that he/she has full right to convey the entire interest herein assigned, and that he/she has not executed, and will not execute, any agreement in conflict therewith.

The undersigned inventors hereby grant Robert Greene Sterne, Esquire, Registration No. 28,912, Edward J. Kessler, Esquire, Registration No. 25,688. Jorge A. Goldstein, Esquire, Registration No. 29,021; Samuel L. Fox, Esquire, Registration No. 30,353; David K.S. Cornwell, Esquire, Registration No. 31,944; Robert W. Esmond, Esquire, Registration No. 32,893; Tracy-Georg Durkin, Fsquire, Registration No. 32,831; Michele A. Cimbala,

Page 1 of 2

Esquire, Registration No. 33,851; Michael B. Ray, Esquire, Registration No. 33,997; Robert E. Sokohl, Esquire, Registration No. 36,013; Eric K. Steffe, Esquire, Registration No. 36,688; Michael Q. Lee, Esquire, Registration No. 35,239; Steven R. Ludwig, Esquire, Registration No. 36,203; Raz E. Fleshner, Esquire, Registration No. 34,331; John M. Covert, Esquire, Registration No. 38,759; and Linda E. Alcorn, Esquire, Registration No. 39,588; all of STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1100 New York Avenue, N.W., Suite 600, Washington, D.C. 20005-3934, and Kenley K. Hoover, Esquire, Registration No. 40,302. James H. Davis, Esquire, Registration No. 40,582; Joseph J. Kenny, Registration No. 43,710; Michaele M. Wales, Esquire, Registration No. 43,975; and Jonathan L. Klein, Esquire, Registration No. 41,119, of Human Genome Sciences, Inc., 9410 Key West Avenue, Rockville, Maryland. 20850, power to insert in this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN WITNESS WHEREOF, executed by the undersigned inventor(s) on the date opposite his/her name.

Date:		Signature of Inventor:	Reinhard EBNER
Date:		Signature of Inventor:	Guo-Liang YU
Date:		Signature of Inventor:	Steven M. RUBEN
Date:		Signature of Inventor:	Stephen ULLRICH
Date:	8114100	Signature of Inventor:	Vifan ZNAI

Page 2 of 2

SKGI Rev. 3/31/00 mac

PATENT REEL: 011076 FRAME: 0385