

<b>PATENT ASSIGNMENT COVER SHEET</b>
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EPAS ID: PAT3824851

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
YUAN-DI C. HALVORSEN	08/15/2000
WILLIAM O. WILKISON	08/15/2000
JEFFREY M. GIMBLE	08/15/2000

**RECEIVING PARTY DATA**

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<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	22709

**PROPERTY NUMBERS Total: 11**

Property Type	Number
Patent Number:	8486700
Patent Number:	7179649
Patent Number:	9200255
Application Number:	14941399
Patent Number:	6841150
Patent Number:	7078232
Patent Number:	7033587
Patent Number:	8048673
Application Number:	11450213
Patent Number:	8911994
Application Number:	14570127

**CORRESPONDENCE DATA**

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**PATENT**

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<b>ATTORNEY DOCKET NUMBER:</b>	COB-1-B
<b>NAME OF SUBMITTER:</b>	PAUL CARANGO
<b>SIGNATURE:</b>	/Paul Carango/
<b>DATE SIGNED:</b>	04/11/2016

**Total Attachments: 4**  
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ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

ZEN-BIO, INC.  
P.O. Box 12503  
Research Triangle Park, NC 27709

its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in **"USE OF ADIPOSE TISSUE-DERIVED STROMAL CELLS FOR CHONDROCYTE DIFFERENTIATION AND CARTILAGE REPAIR"**

as set forth in this United States Patent Application

- executed concurrently herewith
- executed on
- Application No. 09/573,989; filed May 17, 2000

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation, nonprovisionals, continuation-in-parts, and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful affidavits in form and substance which may be requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody said inventions, and to testify in any proceedings relating to said inventions, patent applications, and/or Letters Patent.

The undersigned hereby grant(s) an authorized representative of Assignee the power to insert in this Assignment any further identification that may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

8-15-2000

Date

Yuan-Di C. Halvorsen  
Yuan-Di C. Halvorsen

State of North Carolina

County of Wake }

I, JANET KILLAKA, a Notary Public for said County and State, do hereby certify that Yuan-Di C. Halvorsen personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 15 day of August, 2000.

(Official Seal)

Janet Killaka  
Notary Public

My commission expires 7-23-00

8/15/00

Date

William O. Wilkison

William O. Wilkison

State of NC)

County of Wake)

I, JANET Killalea, a Notary Public for said County and State, do hereby certify that William O. Wilkison personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 15 day of August, 2000.

(Official Seal)

Spencer  
Notary Public

My commission expires 7-23-05

8/15/00  
Date

Jeffrey M. Gimble  
Jeffrey M. Gimble

State of NC)

County of Wake)

I, JANET KILLALEA, a Notary Public for said County and State, do hereby certify that personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 15 day of August, 2000.

(Official Seal)

spice  
Notary Public

My commission expires 7-23-05

Attorney Docket No. 5750-12