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OMB No.	0651-0027	(exp.	6/30/2008)

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United -	States	Patent	and	Trademark	< Offic

RECORDATION FO	DRM COVER SHEET		
PATEN	IS ONLY		
To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.			
1. Name of conveying party(ies)	2. Name and address of receiving party(les)		
Norkol/Fibercore, Inc.	Name: Norkol/Fibercore Holdings, Inc.		
	Internal Address:		
Additional name(s) of conveying party(ies) attached? Yes ✓ No. 3. Nature of conveyance/Execution Date(s):	Street Address: 4478 Old Manchester Highway		
Execution Date(s) January 28, 2003	Officer Address. 4478 Oil Manchester Highway		
Assignment Merger			
Security Agreement Change of Name	City: Tullahoma		
Joint Research Agreement	State: TN		
Government Interest Assignment	State. 114		
Executive Order 9424, Confirmatory License	Country: USA Zip: 37388		
Other	Additional name(s) & address(es) attached? ☐ Yes ✓ No		
4. Application or patent number(s):	document is being filed together with a new application.		
A. Patent Application No.(s)	B. Patent No.(s)		
	6,282,766 5,964,024		
	3,304,024		
Additional numbers att			
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 2		
Name: Lucian Wayne Beavers	1. 1811		
Internal Address: Waddey & Patterson	7. Total fee (37 CFR 1.21(h) & 3.41) \$80.00		
Internet Address. Waldey & Fatterson	□ Authorized to be charged by credit card ☐ Authorized to be charged to deposit account		
Charact Address R. Mark R.	Enclosed		
Street Address: Roundabout Plaza 1600 Division Street, Suite 500	None required (government interest not affecting title)		
	8. Payment Information		
City: Nashville	a. Credit Card Last 4 Numbers		
State; TN Zip: 37203	Expiration Date		
Phone Number: (615)242-2400	b. Deposit Account Number 23-0035		
Fax Number: (615)242-2221	· · · · · · · · · · · · · · · · · · ·		
Email Address:	Authorized User Name Lucian Wayne Beavers		
9. Signature: Secureu	- Aug. 4. 2006		
Signature	Date		
Lucian Wayne Beavers	Total number of pages including cover 8		
Name of Person Signing	sheet, attachments, and documents:		

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or malled to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1460

> **PATENT** REEL: 018061 FRAME: 0484

Michigan Department of Consumer and Industry Services

Filing Endorsement

This is to Certify that the MERGER DOCUMENT

for

NORKOL/FIBERCORE HOLDINGS, INC.

ID NUMBER: 504522

received by facsimile transmission on January 27, 2003 is hereby endorsed Filed on January 28, 2003 by the Administrator.

The document is effective on the date filed, unless a subsequent effective date within 90 days after received date is stated in the document.

Sent by Facsimile Transmission 03028

In testimony whereof, I have hereunto set my hand and affixed the Seal of the Department, in the City of Lansing, this 28th day of January, 2003.

Bureau of Commercial Services

PATENT

REEL: 018061 FRAME: 0485

Date Received	AN DEPARTMENT			
	BUREAU OF	F COMMERCIAL SERVIC		
		(FORSUREAU USE OF fective on the date filed, unless a e date within 90 days after receive	•	
	date is stated in the			
Name Mark S. Demore	st			
Address 19853 W. Outer	Dr., Suite 100			
СНу	State	Zip Code	EFFECTIVE DATE:	essumed names: Dacember 31.
Dearborn, MI 48	124		1 1 · · · · · · · · · · · · · · · · · ·	ferred assumed names appear in Item
		and address you enter above. d to the registered office.	•	
		CERTIFICATE OF	MERGER	
		by Parent and Subsidia		
	(Please	read information and instru	uctions on the last pag	e)
Certificate:	·	Act 284, Public Acts of 1972, 1	-	lon executes the following
i, a. ine name		orporation and its identification		
<u></u>	Norkol/Fibercore I	Holdings, Inc., a Michigan cor	rporetion	504-522
	Norkol/Fibe	proore, Inc., an Illinois corpora	ition	59730754
b. The name	of the surviving corpo	oration and its identification n	umber is:	
b. The name	-	oration and its identification n	•	504-522
1	-	Holdings, Inc., a Michigan co	•	504-522
1	Norkol/Fibercore	Holdings, Inc., a Michigan co	poration Number	er of shares owned by the corporation in each class
c. For each s	Norkol/Fibercore subsidiary corporation,	Holdings, inc., a Michigan co state: Number of outstanding shares in each class	poration Number	er of shares owned by the corporation in each class
c. For each s	Norkol/Fibercore	Holdings, Inc., a Michigan co state: Number of outstanding	poration Number	er of shares owned by the
c. For each s	Norkol/Fibercore subsidiary corporation,	Holdings, inc., a Michigan co state: Number of outstanding shares in each class	poration Number	er of shares owned by the corporation in each class
c. For each s	Norkol/Fibercore subsidiary corporation,	Holdings, inc., a Michigan co state: Number of outstanding shares in each class	poration Number	er of shares owned by the corporation in each class

PATENT₀₀₃ 04:22PM REEL: 018061 FRAME: 0486

бө Aug. 4. 2006; 1:52 РМ Waddey & Patterson 615 242-2221 1/2//03 4:10 РМ; No. 0569 1. 52 в. 4 в/я

PATENT 04:22PM REEL: 018061 FRAME: 0487

2. The shorper is permitted by the state or equitary under whose law it is incorporated and each foreign durpore compiled with their (aw in effecting the merger.) 3. (Delete if not applicable) The consent to the merger by the shall sholders of the substitiony corporation was obtained persuant to its incorporation. (Bush opness to receive by the Articles of incorporation require approver of the receiver by the inciders of more than the persuanted of the shares twenty by the persuant corporation.)	ricks of
The convent to the marger by the shalleholders of the subsidiery corporation was obtained pursuant to its A incompression. (Butch consent to receivery if the Articles of Incorporation require approved of the PMSQPT by	rticits of the voin of
4. (Callete if not applicable) The consent to the matter by the shareholders of the parent corporation was ablained. (Such consent to reprint see of imporporation require shareholder approved of the merger, the plan of marger amands its felicies ition, or a subsidiary is to be the surviving corporation.)	ecentary if its of incorpora-
(Complete only if an affective date is desired other than the date of filing) The margar shall be effective on the	
Signed this dey of Jenuary 2003	
Notice afterment capacitation:	
M. 76/11	

Marcus Y, Wallace, President

PATENT PATENT EEL: 018061²FRAME: 0488^{PM}

EXHIBIT A TO CERTIFICATE OF MERGER BETWEEN NORKOL/FIBERCORE HOLDINGS, INC., A MICHIGAN CORPORATION ("NORKOL/FIBERCORE HOLDINGS")

AND NORKOL/FIBERCORE, INC., AN ILLINOIS CORPORATION ("NORKOL/FIBERCORE")

- A. The Articles of Incorporation of Norkol/Fibercore Holdings shall remain in effect from and after the effective date of the Merger and shall constitute the Articles of Incorporation of the Surviving Corporation (Norkol/Fibercore Holdings) until the same shall be further amended or altered in accordance with the provisions thereof.
- B. The By-Laws of Norkol/Fibercore Holdings, on the effective date of the Merger, shall remain in full force and effect and shall constitute the By-Laws of the Surviving Corporation, until the same shall be altered or amended in accordance with the provisions thereof.
- C. The directors of Norkol/Fibercore Holdings shall, from and after the effective date of the Merger, serve as the Directors of the Surviving Corporation until their respective successors are duly elected and qualified. Subject to the authority of the Board of Directors of the Surviving Corporation, as provided by law and the By-Laws of the Surviving Corporation, the officers of Norkol/Fibercore Holdings from and after the effective date of the Merger, shall serve as the officers of the Surviving Corporation.
- D. At the Effective Time of the Merger, by virtue of the Merger and without any action on the part of the holders:
 - Each issued and outstanding share of Norkol/Fibercore
 Holdings common stock shall continue in existence without
 change.
 - (2) Each share of the issued and outstanding shares of common stock of Norkol/Fibercore shall be converted into one validly issued, fully paid, and nonassessable share of common stock

PATENT 0112772003 REEL: 018061 FRAME: 0489 of the Surviving Corporation. Since those shares of its own stock will then be held by Norkol/Fibercore Holdings, the converted shares will be automatically cancelled and return to the status of authorized but unissued shares.

E. Except as specifically set forth in this Plan, the identity, existence, purposes, powers, objects, franchises, privileges, rights, and immunities of Norkol/Fibercore Holdings shall continue unaffected and unimpaired by the Merger, and the corporate franchises, existence, privileges, rights and immunities of Norkol/Fibercore shall be merged into Norkol/Fibercore Holdings, and Norkol/Fibercore Holdings shall, as the Surviving Corporation, be fully vested therewith.

F. At the Effective Time of the Merger, the separate existence of Norkol/Fibercore shall cease, and in accordance with the terms of this Plan, the Surviving Corporation shall possess all the rights, privileges, powers and franchises of a public as well as of a private nature, and be subject to all restrictions, disabilities, and duties of each of the Constituent Corporations. All rights, privileges, powers, and franchises of each of the Constituent Corporations, all property, real, personal, and mixed, all debts due to either of the Constituent Corporations on whatever account, including stock subscriptions, all other things in action, and all interests of or belonging to or due to each Corporation shall be taken and deemed to be transferred to and vested in the Surviving Corporation without further act or deed. All property, rights, privileges, powers, and franchises, and all interests shall be as effectually the property of the Surviving Corporation as they were of the respective Constituent Corporations, and the title to any real estate or interest therein, vested by deed or otherwise in either Corporation, shall not revert or be in any way impaired by reason of the Merger.

G. The Surviving Corporation shall be responsible and liable for all the liabilities and obligations of the Constituent Corporations, and any claim existing or action or proceeding pending by or against either of the Constituent Corporations may be prosecuted as if the Merger had not

PATENT 0172772003 04:22PM REEL: 018061 FRAME: 0490 SeAug. 4. 2006 1:53PM Waddey & Patterson 615,242-2221 1/27/03 4:11PM; PORTAL #656; Page 9/9

taken place, or the Surviving Corporation may be substituted in its place. Neither the rights of creditors nor any liens on the property of either of the Constituent Corporations shall be impaired by the Merger, and all debts, liabilities, and duties of each of the Constituent Corporations shall attach to the Surviving Corporation, and may be enforced against it to the same extent as if the debts, liabilities, and duties had been incurred or contracted by it.

PhDemoreacThomas, KarkNorkol - Pibercore/Exhibit A- Cert of Murgandoc

Michigan Department of Consumer and Industry Services

Filing Endorsement

This is to Certify that the MERGER DOCUMENT

for

NORKOL/FIBERCORE HOLDINGS, INC.

ID NUMBER: 504522

received by facsimile transmission on January 27, 2003 is hereby endorsed Filed on January 28, 2003 by the Administrator.

The document is effective on the date filed, unless a subsequent effective date within 90 days after received date is stated in the document.



Sent by Facelmile Transmission 03028

In testimony whereof, I have hereunto set my hand and affixed the Seal of the Department, in the City of Lansing, this 28th day of January, 2003.

Bureau of Commercial Services

PATENT REEL: 018061 FRAME: 0492

	T OF CONSUMER & INDUS		
BUREAU C	OF COMMERCIAL SERVICE (FORBUREAU USEON)		
	I PLE MANNEY HAR SALE	-1)	
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subsequent effect	live date within 90 days after received		
date is stated in the	ne decument.	<u>_</u>	
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Mark S. Demorest			
ldross		-11	
19853 W. Outer Dr., Suite 100		EFFECTIVE DATE:	
ty State	Zip Code	14	new assumed names: December 31.
Сеаrborn, MI 48124			transferred assumed names appear in item
Document will be returned to the nam	e and address you enter above. 🦼		
if left blank document will be mai	led to the registered office.		
	CERTIFICATE OF	MERGER	
For use	by Parent and Subsidiar	v Profit Corpor	ations
	e read information and instruc		
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Pursuant to the provisions of	Act 284, Public Acts of 1972, th	e undersigned com	coretion executes the following
Certificate:	,	• .	
 a. The name of each constituent 	corporation and its identification	number is:	
Norkel(Filhercore	e Holdings, Inc., a Michigan com	varation	504 500
ACI KOMPIDEI COM	e rocange, mc., a wicingen cost	MALION	504-522
Norkol/Fit	percore, Inc., an Illinois corporati	on	59730754
	111111111111111111111111111111111111111		
b. The name of the surviving con	poration and its identification nur	mber is:	
		,	
Norkol/Fibercon	e Holdings, Inc., a Michigan сотр	oration	504-522
- 1 1 - 1			, , , , , , , , , , , , , , , , , , , ,
 c. For each subsidiary corporation 	n, state:		
	No. and the second second second	LI.	
Norte of corporation	Number of outstanding		umber of shares owned by the
Name of corporation	shares in each class	pa	arent corporation in each class
Norkol/Fibercore, Inc.	100 common		100 common
	TOO CONTINUES		TOO CONTRITION

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2.	The marger is permitted by the state or mountry under whose law it is incorporated and each foreign corporation has complied with their law in effecting the merger.
1	(Delete if not applicable) The excuent to the merger by the étureholders of the substitutely corporation was obtained pursuant to its Articles of broosporation. (Bluck consent in recessary if the Articles of Incorporation require approve of the merger by the vote of the inciders of more than the percentage of the charact owned by the parters approved on.)
4	(Delete if not applicable) The consent to the metger by the shareholders of the person corporation was abbained. (Such consent is recently if no Articles of Incorporation require stementator approval of the mesger, the plan of merger amends its Astales of Incorporation, or a subsidiary is to be the surviving corporation.)
3	(Complete only if an affective date is desired other than the date of filing) The marger shall be effective on thedayof
	Signed this 1st devot January 2003
	Name of page (Carporation)

Marizia T, Wallace, President

PATENT REEL: 018061 FRAME: 0495

EXHIBIT A TO CERTIFICATE OF MERGER BETWEEN NORKOL/FIBERCORE HOLDINGS, INC., A MICHIGAN CORPORATION

("NORKOL/FIBERCORE HOLDINGS")

AND NORKOL/FIBERCORE, INC., AN (LLINOIS CORPORATION ("NORKOL/FIBERCORE")

- A. The Articles of Incorporation of Norkol/Fibercore Holdings shall remain in effect from and after the effective date of the Merger and shall constitute the Articles of Incorporation of the Surviving Corporation (Norkol/Fibercore Holdings) until the same shall be further amended or altered in accordance with the provisions thereof.
- B. The By-Laws of Norkol/Fibercore Holdings, on the effective date of the Merger, shall remain in full force and effect and shall constitute the By-Laws of the Surviving Corporation, until the same shall be altered or amended in accordance with the provisions thereof.
- C. The directors of Norkol/Fibercore Holdings shall, from and after the effective date of the Merger, serve as the Directors of the Surviving Corporation until their respective successors are duly elected and qualified. Subject to the authority of the Board of Directors of the Surviving Corporation, as provided by law and the By-Laws of the Surviving Corporation, the officers of Norkol/Fibercore Holdings from and after the effective date of the Merger, shall serve as the officers of the Surviving Corporation.
- D. At the Effective Time of the Merger, by virtue of the Merger and without any action on the part of the holders:
 - Each issued and outstanding share of Norkol/Fibercore
 Holdings common stock shall continue in existence without
 change.
 - (2) Each share of the issued and outstanding shares of common stock of Norkol/Fibercore shall be converted into one validly issued, fully paid, and nonassessable share of common stock

PATENT REEL: 018061 FRAME: 04:33 PM owAug. 4. 2006a 1:55PM Waddey & Patterson 615,242-222 31/27/03 4:11PM; No. 0568 7. 7/8

of the Surviving Corporation. Since those shares of its own stock will then be held by Norkol/Fibercore Holdings, the converted shares will be automatically cancelled and return to the status of authorized but unissued shares.

E. Except as specifically set forth in this Plan, the identity, existence, purposes, powers, objects, franchises, privileges, rights, and immunities of Norkol/Fibercore Holdings shall continue unaffected and unimpaired by the Merger, and the corporate franchises, existence, privileges, rights and immunities of Norkol/Fibercore shall be merged into Norkol/Fibercore Holdings, and Norkol/Fibercore Holdings shall, as the Surviving Corporation, be fully vested therewith.

F. At the Effective Time of the Merger, the separate existence of Norkol/Pibercore shall cease, and in accordance with the terms of this Plan, the Surviving Corporation shall possess all the rights, privileges, powers and franchises of a public as well as of a private nature, and be subject to all restrictions, disabilities, and duties of each of the Constituent Corporations. All rights, privileges, powers, and franchises of each of the Constituent Corporations, all property, real, personal, and mixed, all debts due to either of the Constituent Corporations on whatever account, including stock subscriptions, all other things in action, and all interests of or belonging to or due to each Corporation shall be taken and deemed to be transferred to and vested in the Surviving Corporation without further act or deed. All property, rights, privileges, powers, and franchises, and all interests shall be as effectually the property of the Surviving Corporation as they were of the respective Constituent Corporations, and the title to any real estate or interest therein, vested by deed or otherwise in either Corporation, shall not revert or be in any way impaired by reason of the Merger.

G. The Surviving Corporation shall be responsible and liable for all the liabilities and obligations of the Constituent Corporations, and any claim existing or action or proceeding pending by or against either of the Constituent Corporations may be prosecuted as if the Merger had not

PATENT 04:22P REEL: 018061 FRAME: 0497 SeAug. 4. 2006, 1:55PM Waddey & Patterson 615,242-2221,1/27/03 4:11PM; No. 0568 P. 8/8

taken place, or the Surviving Corporation may be substituted in its place. Neither the rights of creditors nor any liens on the property of either of the Constituent Corporations shall be impaired by the Merger, and all debts, liabilities, and duties of each of the Constituent Corporations shall attach to the Surviving Corporation, and may be enforced against it to the same extent as if the debts, liabilities, and duties had been incurred or contracted by it.

PhDemorest Thomas, Karl Norkel - Pibercon Establis A- Cent of Mergendoe