4/39/02			
DECORDA!	U.S. DEPARTMENT OF COMMERCE  Patent and Trademark Office		
(Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)	Doolset No.		
	102086352		
1.Name of conveying party(ies): Silvio Micali	Name and address of receiving party(ies)     Name: Novomodo, Inc.		
Additional name(s) of conveying party(ies) attached?  YesNo X	Internal Address:		
3. Nature of conveyance:			
(X) Assignment ( ) Merger	Street Address: 459 Chestnut Hill Avenue		
( ) Security Agreement ( ) Change of Name	Brookline, Massachusetts 02445		
( ) Other: Execution Date: <u>April 17, 2002</u>	Additional name(s) & address(es) attached? Yes No X		
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, t  A. Patent Application No.(s) – See attached schedule.	he execution date of the applications is:  B. Patent No.(s) – See attached schedule.		
Additional numbers atta	ched? Ves X No in		
<ul> <li>5. Name and address of party to whom correspondence concerning document should be mailed:</li> <li>6.</li> <li>Name: Patent Group</li> <li>Internal Address: Hutchins, Wheeler &amp; Dittmar</li> </ul>	6. Total number of applications and patents involved:		
Street Address: 101 Federal Street	S 2 ;		
City: Boston State: MA ZIP: 02110	7.Total fee (37 CFR 3.41)\$ 840.00		
	7.Total fee (37 CFR 3.41)\$  X Enclosed Authorized to be charged to deposit account		
	8.Deposit account number:		
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DO NOT US	E THIS SPACE		
9. Statement and signature.			
To the best of my knowledge and belief, the foregoing information original document	on is true and correct and any attached copy is a true copy of the		

Donald W. Muirhead, Reg. No. 33,978

Name of Person Signing

Date

Total number of pages including cover sheet, attachments, and document: 4

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

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Washington, D.C. 20231

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# Schedule of Patents and Patent Applications Assigned to Novomodo, Inc.

## Patent Nos.

- 1. U.S. Patent No. 5,420,927: Method for Certifying Public Keys in a Digital Signature Scheme
- 2. U.S. Patent No. 5,604,804: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- 3. U.S. Patent No. 5,717,759: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- 4. U.S. Patent No. 5,610,982: Compact Certification with Threshold Signatures
- 5. U.S. Patent No. 5,666,416: Certificate Revocation System
- 6. U.S. Patent No. 5,793,868: Certificate Revocation System
- 7. U.S. Patent No. 5,717,758: Witness-Based Certificate Revocation System
- 8. U.S. Patent No. 5,960,083: Certificate Revocation System
- 9. U.S. Patent No. 5,717,757: Certificate Issue Lists
- 10. U.S. Patent No. 6,097,811: Tree-Based Certificate Revocation System
- 11. U.S. Patent No. 6,292,893 B1: Certificate Revocation System
- 12. U.S. Patent No. 6,301,659 B1: Tree-Based Certificate Revocation System

### Patent Application Nos.

- 1. U.S. Patent Application No. 08/992,897: Efficient Certificate Revocation
- 2. U.S. Patent Application No. 60/277,244: Cambridge PKI –Secure, Efficient and Scalable Validation of Digital Certificates
- 3. U.S. Patent Application No. 60/300,621: Secure, Efficient, and Scalable Validation of Digital Certificates
- 4. U.S. Patent Application No. 60/344,245: Tenant Cas
- 5. U.S. Patent Application No. 09/471,853 Tree-Based Certificate Revocation System
- 6. U.S. Patent Application No. 09/947,478 Tree-Based Certificate Revocation System
- 7. U.S. Patent Application No. 09/915,180 Certificate Revocation System
- 8. U.S. Patent Application No. 10/103,541 filed on March 20, 2002 Scalable Certificate Validation and Simplified PKI Management
- 9. PCT Application No. PCT/US02/08865 filed on March 20, 2002 Scalable Certificate Validation and Simplified PKI Management

HWDHWD2 988231v1

PATENT REEL: 012865 FRAME: 0619

#### ASSIGNMENT

WHEREAS, Dr. Silvio Micali of Brookline, Massachusetts is the owner of the patents and patent applications listed on Exhibit A attached hereto (collectively the "Patent Assets") and has full right to convey the entire right, title and interest, both legal and equitable, in and to the Patent Assets, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

WHEREAS, Novomodo, Inc. ("Assignee"), having a principal place of business at Brookline, Massachusetts, is desirous of acquiring the entire right, title and interest in and to the Patent Assets and any and all patents to be obtained therefor;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the undersigned, the undersigned does hereby sell, assign, transfer and set over unto said Assignee, its successors and assigns, the entire right, title and interest throughout the world in and to said Patent Assets, in any form or embodiment thereof, and in and to any applications filed in the U.S. or any foreign country based thereon, including the right to file said applications and claim priority under the provisions of any U.S. or international convention or treaty; also the entire right, title and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon based on said Patent Assets and any divisional, continuation, continuation-in-part or substitute applications which may be based upon said Patent Assets in this or any foreign country; and the undersigned hereby authorize and request the issuing authority to issue any and all patents based on said Patent Assets to said Assignee or its successors and assigns.

The undersigned further agrees, without any further payment or compensation by said Assignee or its successors and assigns, to communicate to said Assignee, its representatives or agents or its successors and assigns, any facts relating to said Patent Assets including evidence for interference purposes or for other legal proceedings whenever requested; testify in any interference or other legal proceedings, whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said Assignee, its successors or assigns and nominees to secure, obtain and enforce proper patent protection in this or any foreign country.

IN TESTIMONY WHEREOF, the undersigned have hereunto set their hands and seals on the date after their signatures.

April 17, 2002			
Date	<del></del>		Dr. Silvio Micali
State of County of	Massachusetts Suffolk	)	)

On this 17th day of April, 2002, before me personally appeared Dr. Silvio Micali, to me personally known, and known to me to be the person who signed the foregoing assignment, and acknowledged the signing of same as his free act and deed.

Donald W. Muirhead, Notary Public

My commission expires February 24, 2006

HWD2 991247v1

PATENT REEL: 012865 FRAME: 0620

#### EXHIBIT A PATENTS/APPLICATIONS TO BE ASSIGNED TO NOVOMODO

- U.S. Patent No. 5,420,927: Method for Certifying Public Keys in a Digital Signature Scheme
- 2. U.S. Patent No. 5,604,804: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- U.S. Patent No. 5,717,759: Improved Method for Certifying Public Keys in a Digital Signature Scheme
- U.S. Patent No. 5,610,982: Compact Certification with Threshold Signatures
- U.S. Patent No. 5,666,416: Certificate Revocation System
- U.S. Patent No. 5,793,868: Certificate Revocation System
- 7. U.S. Patent No. 5,717,758: Witness-Based Certificate Revocation System
- 8. U.S. Patent No. 5,960,083: Certificate Revocation System
- 9. U.S. Patent No. 5,717,757: Certificate Issue Lists
- 10. U.S. Patent No. 6,097,811: Tree-Based Certificate Revocation System
- 11. U.S. Patent No. 6,292,893 B1: Certificate Revocation System
- 12. U.S. Patent No. 6,301,659 B1: Tree-Based Certificate Revocation System
- 13. U.S. Patent Application No. 08/992.897: Efficient Certificate Revocation
- 14. U.S. Patent Application No. 60/277,244: Cambridge PKI -Secure, Efficient and Scalable Validation of Digital Certificates
- 15. U.S. Patent Application No. 60/300,621: Secure, Efficient, and Scalable Validation of Digital Certificates
- 16. U.S. Patent Application No. 60/344,245: Tenant Cas
- 17. U.S. Patent Application No. 09/471,853: Tree-Based Certificate Revocation System
- 18. U.S. Patent Application No. 09/947,478: Tree-Based Certificate Revocation System
- 19. European Patent Application No. 96937813.2: Tree-Based Certificate Revocation System
- 20. European Patent Application No. 01119418.0: Tree-Based Certificate Revocation System
- 21. U.S. Patent Application No. 09/915,180: Certificate Revocation System
- 22. U.S. Patent Application No. 10/103,541: Scalable Certificate Validation and Simplified PKI Management
- 23. PCT Application No. PCT/US02/08865 filed on March 20, 2002: Scalable Certificate Validation and Simplified PKI Management

And all applications claiming priority to any of the above, including all continuations, continuations-in-part, and foreign equivalents of the above-referenced patents and patent applications, with the exception of U.S. Patent Application No. 09/654,874 - Batch Tree Signing (the '874 application), and any continuations or continuations-inpart thereof having claims directed to an invention similar to the invention corresponding to the current claims of the '874 application.

HWD2 979770v1

**PATENT** REEL: 012865 FRAME: 0621

RECORDED: 04/29/2002