PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
Kim B. ROBERTS	09/27/2011	
Shahab OVEIS GHARAN	09/27/2011	
Amir K. KHANDANI	09/26/2011	

RECEIVING PARTY DATA

Name:	CIENA CORPORATION	
Street Address:	1201 Winterson Road	
City:	Linthicum	
State/Country:	MARYLAND	
Postal Code:	21090	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	13253331	

CORRESPONDENCE DATA

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BLAKE, CASSELS & GRAYDON, LLP Correspondent Name: 45 O'CONNOR ST., 20TH FLOOR Address Line 1: Address Line 4: OTTAWA, CANADA K1P 1A4

ATTORNEY DOCKET NUMBER: 102831/00441

NAME OF SUBMITTER: Kent Daniels

Total Attachments: 3

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> **PATENT REEL: 027018 FRAME: 0838**

501681998

PATENT Attorney Docket No.: 10.2059

ASSIGNMENT

WHEREAS, Kim B. Roberts; Shahab Oveis Gharan and Amir Khandani (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

MINIMUM VARIANCE CARRIER RECOVERY

	WHEREAS	, CIENA CORI	PORATION, 1201	Winterson Roa	ad, Linthicum,	, Maryland
21000	IICA Charaine	fter referred to	og "A SSTONTER") i	decirous of ac	quiring the en	tira right

for which U.S. Patent Application No. 13/253,331 was filed on 10/05/2011

21090 USA (hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title, and interest in and to said invention, and in and to said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, in accordance with obligations entered into pursuant to an Employment Agreement or other agreement and/or for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNORS hereby sell, transfer and assign to said ASSIGNEE, and to ASSIGNEE'S successors and assigns, ASSIGNORS' entire right, title, and interest in and to said invention and improvements invented and originated by ASSIGNORS in the United States and its territorial possessions and in any and all foreign countries and to all Letters Patent or similar legal protections in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any application claiming priority to/from the application, or any continuation, division, continuation-in-part, reexamination, renewal, substitute, extension, or reissue thereof or any legal equivalent thereof in a foreign country for the full term(s) for which the same may be granted; and authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents or legal equivalents thereof, to issue same for this invention to ASSIGNEE, its lawful successors and assigns.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments, or affidavits required to apply for, obtain, maintain, issue, and/or enforce said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries which may be necessary or desirable to carry out the purposes thereof.

[Signature Page Follows]

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PATENT REEL: 027018 FRAME: 0839 IN WITNESS WHEREOF, we have hereunto set hand and signed on the date indicated below:

Full Name of Sole/First Inventor: Kim B. Roberts

Inventor's Signature: Date: Syt 27 2011

Full Name of Joint/Second Inventor: Shahab Oveis Gharan

Inventor's Signature: Shahad Owi Date: Sept 27 2011

Full Name of Joint/Third Inventor: Amir Khandani

Inventor's Signature: Date: Date:

IN WITNESS WHEREOF, we have here	runto set hand and signed o	n the date indicated below:
Full Name of Sole/First Inventor:	Kim B. Roberts	
Inventor's Signature:		Date:
Full Name of Joint/Second Inventor:	Shahab Oveis Gharan	
inventor's Signature:		Date:
Full Name of Joint/Third Inventor:	Amir Khandani	
Inventor's Signature:		Date: Sept 26, 2011

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RECORDED: 10/05/2011

PATENT REEL: 027018 FRAME: 0841