PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KOMATSU LTD.	04/23/2010

RECEIVING PARTY DATA

Name:	GIGAPHOTON INC.
Street Address:	2-6-1 Otemachi, Chiyodu-ku,
City:	Tokyo
State/Country:	JAPAN
Postal Code:	100-0004

PROPERTY NUMBERS Total: 6

Property Type	Number
Application Number:	12385835
Application Number:	12385955
Application Number:	12453058
Application Number:	12385569
Application Number:	12482796
Application Number:	12482824

CORRESPONDENCE DATA

501186415

Fax Number: (202)721-8250

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-721-8200
Email: wlp@wenderoth.com

Correspondent Name: Wenderoth, Lind & Ponack, LLP

Address Line 1: 1030 15th Street, N.W.
Address Line 2: Suite 400 EAST

Address Line 4: Washington, DISTRICT OF COLUMBIA 20005

NAME OF SUBMITTER: Kelly J. Fore

PATENT

Total Attachments: 12
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In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR:

KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on September 3, 2009

at Reel 023189 Frame 0732

hereby sells, assigns and transfers to

ASSIGNEE:

GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: SLAB TYPE LASER APPARATUS

and which is found in U.S. Patent application Serial No. 12/482,824, filed June 11, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

Angel IN W	TITNESS WHEREOF, I/WE have hereunto set hand and seal this 23, 20/6 (Date of signing).
- npra	12 01
	Signature of ASSIGNOR
	Tadayaki Hanamoto (type or pfint the name of the above person authorized to sign on behalf of ASSIGNOR)
	General Manager of Intellectual Property Department
(This execution by th	assignment should preferably be acknowledged before a United States Consul. If not, then the e Inventor(s) should be witnessed by at least two witnesses who sign here.) Witness
	WitnessToshitaka Kuresawa
	ACKNOWLEDGMENT
	ss
above-named	
individual(s) who f his (their) ow	no executed the foregoing assignment, who did acknowledge to me that he (they) executed the same on free will for the purposes therein set forth.
SEAL	Official Signature
	Official Title
The ab	ove application may be more particularly identified as follows:
	on Serial No.12/482 824 Filing Date June 11, 2009

Applicant Reference Number FP1119US Atty Docket No. 2009 0913A

Title of Invention SLAB TYPE LASER APPARATUS

PATENT

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on September 3, 2009

at Reel 023189, Frame 0934

hereby sells, assigns and transfers to

ASSIGNEE: GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS

and which is found in U.S. Patent application Serial No. 12/482,796, filed June 11, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

IN WITNESS W	HEREOF, I/WE have here	eunto set hand and se	eal this	
April 23, 20/	Ï	signing). Thursday gnature of ASSIGNOR	lo	
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Witness _	Toshitaka Kurosa			
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Thisabove-named	day of		, before me personally came the to me personally known as the	•
individual(s) who executed t	the foregoing assignment, who or the purposes therein set for		ne that he (they) executed the same	-
SEAL			Official Signature	
BEAD				
			Official Title	
	-			
The above applica	ation may be more particul	arly identified as fol	lows:	

U.S. Application Serial No. 12/482,796 Filing Date June 11, 2009

Applicant Reference Number FP1118US Atty Docket No. 2009_0912A

Title of Invention EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS

PATENT

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on July 7, 2009

at Reel 022920 Frame 0847

hereby sells, assigns and transfers to

ASSIGNEE: GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: <u>EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS</u>

and which is found in U.S. Patent application Serial No. 12/385,569, filed April 13, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

IN WITNESS WHER	EOF, I/WE have here(Date of s		eal this	
1171 = 0, 2010	T	Jeanumo (9	
	(ty ₁	adayaki Hanai pe of print the name of the thorized to sign on behalf	e above person of ASSIGNOR)	
	Go Tit	eneral Manager (of Intellectual Property,	Department
(This assignment should execution by the Inventor(s) should witness	preferably be acknowed by at le	ast two witnesses who	ed States Consul. If not, then o sign here.)	the
Witness	Toshitaka Ku	7		
	ACKNOWL	EDGMENT		
	} ss			
Thisabove-namedindividual(s) who executed the for	day ofegoing assignment, who	, 20, did acknowledge to r	, before me personally came to me personally known as me that he (they) executed the sa	the the
of his (their) own free will for the	purposes therein set for	rth.	(,	
SEAL			Official Signature	
			Official Title	_
The above application i	nay be more particula	arly identified as fol	lows:	
U.S. Application Serial No. <u>12/3</u>	885,569 Filing Date	e April 13, 2009		

Applicant Reference Number FP1117US Atty Docket No. 2009 0573A

Title of Invention <u>EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS</u>

PATENT

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on July 20, 2009

at Reel 022976 Frame 0001

hereby sells, assigns and transfers to

ASSIGNEE:

GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS

and which is found in U.S. Patent application Serial No. 12/453,058, filed April 28, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

IN WIT	(type auth		ut
execution by the In	ignment should preferably be acknowled inventor(s) should be witnessed by at lease Witness Masacki	edged before a United States Consul. If not, then the ast two witnesses who sign here.)	
,	Witness <u>Toshitaka Ku</u>	urosaWa	
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above-namedindividual(s) who		, 20, before me personally came the to me personally known as the did acknowledge to me that he (they) executed the same th.	
SEAL		Official Signature	
		Official Title	
The abov	e application may be more particular	arly identified as follows:	
U.S. Application	Serial No. <u>12/453,058</u> Filing Date	e April 28, 2009	

Title of Invention EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS

Applicant Reference Number FP1114US Atty Docket No. 2009 0683A

PATENT

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on August 21, 2009

at Reel 023128, Frame 0730

hereby sells, assigns and transfers to

ASSIGNEE: GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: EXTREME ULTRAVIOLET LIGHT SOURCE APPARATUS AND NOZZLE PROTECTION DEVICE

and which is found in U.S. Patent application Serial No.12/385,955, filed April 24, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

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The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

IN WITNESS WHEREOF, I/WE have hereunto set ha	
April 23, 20/0 (Date of sig	Idanamolo
Signal	ture of ASSIGNOR
· ·	
Tai	dayuki Hauamoto
(type o	or print the name of the above person prized to sign on behalf of ASSIGNOR)
Title	neval Manager of Intellectual Property Department
(This assignment should preferably be acknowled execution by the Inventor(s) should be witnessed by at least	dged before a United States Consul. If not, then the two witnesses who sign here.)
Witness Masaaki	
Witness Toshitaka Kurosawa	<u> </u>
ACKNOWLE	DGMENT
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above-named	, 20, before me personally came the to me personally known as the
individual(s) who executed the foregoing assignment, who di of his (their) own free will for the purposes therein set forth.	id acknowledge to me that he (they) executed the same .
, ,	
SEAL	Official Signature
	Official Title
	
The above application may be more particularly	y identified as follows:
U.S. Application Serial No. 12/385,955 Filing Date A	<u> April 24, 2009</u>
Applicant Reference Number <u>FP1113US</u> Atty Docke	et No. <u>2009_0673A</u>

Title of Invention <u>EXTREME ULTRAVIOLET LIGHT SOURCE APPARATUS AND NOZZLE PROTECTION DEVICE</u>

PATENT

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR: KOMATSU LTD.

2-3-6, Akasaka, Minato-ku Tokyo, Japan 107-8414

to whom an Assignment was Recorded on July 13, 2009

at Reel 022945 Frame 0206

hereby sells, assigns and transfers to

ASSIGNEE: GIGAPHOTON INC.

2-6-1 Otemachi, Chiyodu-ku, Tokyo, Japan 100-0004

and the successors, assigns and legal representatives of the ASSIGNEE, the Assignor's entire right, title and interest for the United States and its territorial possessions in and to any and all improvements which are disclosed in the invention entitled: <u>EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS</u>

and which is found in U.S. Patent application Serial No. 12/385,835, filed April 21, 2009.

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

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

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The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 EAST, Washington, D.C. 20005, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordal of this document.

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J IN WI	TNESS WHEREOF,			eal this	
April	23, 20/0	(Date of signi	ng).		
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		Signatur	e of ASSIGNOR		
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(This a execution by the	Inventor(s) should be	vitnessed by at least to	wo witnesses who	ed States Consul. If not, sign here.)	, then the
	Witness	rsaaki C	Ver moto		
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	Witness Toshi	taka Kurosawa	<u>-</u>		
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of his (their) own	free will for the purpo	ses therein set forth.	aoiano wieago to i	ne that he (they) exceuted	the same
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The abo	ove application may b	e more particularly i	identified as fol	lows:	

U.S. Application Serial No. 12/385,835 Filing Date April 21, 2009

Applicant Reference Number $\underline{FP1112US}$ Atty Docket No. $\underline{2009_0646A}$

Title of Invention $\underline{\textbf{EXTREME ULTRA VIOLET LIGHT SOURCE APPARATUS}}$

PATENT REEL: 024437 FRAME: 0532

RECORDED: 05/25/2010