FORM PTO-1595 (Rev. 6-93)	06-26-20	103 	SHEET	U.S. DEP	ARTMENT OF COMMERCE Patent and Trademark Office
To the Honorable Commissioner of P	1024829				nent or copy thereof.
Names of conveying parties:		2. Name ar	nd address of	f receiving	party:
1) LIZHI ZHU 2) XINGYI XU 6_2	(1, 1, 2				EMS CORPORATION
3)	4 ~0)	Internal	Address:		
4) 5)					
6)					6 = 3
Additional names of conveying parties atta	ached?Yes _XNo				<u> </u>
Nature of conveyance: X Assignment	Merger				ERCE DRIVE NORTH
Security Agreement		7			
Other	_				
	 _	City: <u>DE</u>	EARBORN		State MI
Execution Dates: 1) <u>APRIL 9, 2003</u> 4)		Zip: <u>481</u>	120		
1) APRIL 9, 2003 4) 2) MAY 19, 2003 5) 3) 6)		Additional nam	nes & addresses	attached?	_Yes <u>X</u> No
A. Patent Application No(s).	document is being filed t the filing date of t	the application			
10/345,894	1242 1		/ V NI	_	
Add	ditional numbers attache	d? \	/es <u>X</u> No) 	
	Name and address of party to whom correspondence concerning document should be mailed:		6. Total number of applications and patents involved <u>1</u>		
Name: <u>Seed Intellectual Prope</u>	erty Law Group PLLC				
internal Address: DALE R. C	СООК	7. Total Fe	e (37 CFR 3.	41):	\$40
		X End	closed		
Street Address: 701 Fifth Aven	ue, Suite 6300	Aut	horized to be	charged	to deposit account
City: <u>Seattle</u> State: <u>WA</u> ZIP	: _98104-7092	8. Deposit	account num	ber:	
06/25/2003 ECDOPER 00000036 10345894		19-10	90		
01 FC:8021 40.00 QP	DO NOT USE	THIS SPACE	·		
9. Statement and signature. To the best of my knowledge a true copy of the original docum		information is	true and cor	rect and a	nny attached copy is a
DALE R. COOK Name of Person Signing	Signatu			207	2653
	s including cover sheet,		and docume		4

OMB No. 0651-0011 (exp 4/94) - Docket No. 130209.464

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ASSIGNMENT

WHEREAS, we, Lizhi Zhu and Xingyi Xu (hereinafter referred to as ASSIGNORS), having mailing addresses of 48580 Greenwich Circle, Canton, Michigan 48188, and 48655 Manhattan Circle, Canton, Michigan 48188, respectively, are the joint inventors of an invention entitled "DEVICE AND METHOD OF COMMUTATION CONTROL FOR AN ISOLATED BOOST CONVERTER," as described and claimed in the specification for which an application for United States letters patent was filed on January 15, 2003, and assigned Application No. 10/345,894. This application claims the benefit of Provisional Application No. 60/319,070, filed on January 16, 2002.

WHEREAS, Ballard Power Systems Corporation (hereinafter referred to as ASSIGNEE), a corporation of the State of Delaware having a place of business at 15001 Commerce Drive North, Dearborn, Michigan 48120, is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United

PATENT REEL: 014199 FRAME: 0358 States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

419103	light The		
Date	Lizhi Zhu		
State of Michigan			
County of Wayne	SS.		

I certify that I know or have satisfactory evidence that Lizhi Zhu is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Signature of
Notary Public Combinan Smith

Printed Name American Smith

My appointment expires 7-21-06

AMERICAL SMITH

MOTARY PUBLIC WAYNE CO., MI
MY COMMISSION EXPERICAL 91 2004

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Application No. 10/345,894

5/19/2003	1 - 800 Z
Date	Xingyi Xu
State of) 83.
County of	
who appeared before me, and	know or have satisfactory evidence that Xingyi Xu is the person disaid person acknowledged that he signed this instrument and se and voluntary act for the uses and purposes mentioned in the
1	Dated
	Signature of Notary Public
I	rinted Name
T.	My appointment expires

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RECORDED: 06/24/2003

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PATENT REEL: 014199 FRAME: 0360