PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Shinichi MIYAZAKI	09/30/2009
Hiroyuki YOSHINO	09/30/2009
Nobuaki AZAMI	09/30/2009
Atsushi OSHIMA	09/30/2009
Noritaka IDE	09/30/2009
Kunio TABATA	09/30/2009

RECEIVING PARTY DATA

Name:	Seiko Epson Corporation
Street Address:	4-1, Nishi-shinjuku 2-chome
Internal Address:	Shinjuku-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	163-0811

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12582766

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 16443.677

PATENT

REEL: 023400 FRAME: 0015

\$40.00 12582/66

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NAME OF SUBMITTER:	R. Burns Israelsen
Total Attachments: 2 source=16443-677-Assignment#page1.tif source=16443-677-Assignment#page2.tif	

PATENT REEL: 023400 FRAME: 0016

譲渡証 (Translation/日本語訳)

下記に署名した私/私達、

宮崎 新一,吉野 浩行,阿左美 晋亮,大島 敦, 井出 典孝,田端 邦夫,

は、ある発明を創出し、これについて合衆国特許出願は

\boxtimes	ここに私/私達	により署名	され ,
	に私/私	達により(そ	れぞれ)署名され
	に出願され、	出願番号	が交付され、
	PCT 国際出願	として	に出願され、
そ	の発明は、		

パルス幅変調回路及び液体噴射型印刷装置

という名称である。 そして、ここにその受領を認める対価で: 私/私達は、当該発明/出願について、合衆国とその属領及び 全ての外国に於ける全面的かつ独占的な権利;合衆国とその属 領及び全ての外国に於いて発行される特許証に関わる全ての権 利、所有権、利益; 一部継続出願、継続出願、分割出願、差替 え出願、再発行出願、特許期間延長等、合衆国とその属領及び 全ての外国に於いて既に出願されたか若しくは今後出願される 特許に関わる全ての権利;そして、国際条約、同盟、契約、法 令、協定(将来制定されるものを含む)に基づく全ての優先権 を伴う一切の権利;を、日本国東京都新宿区西新宿二丁目4番 1号に住所を有するセイコーエプソン株式会社、その後継者、 譲受人及び法定代理人に対して、売却、譲渡、移転するものと する。

さらに、私/私達は、セイコーエプソン株式会社、(以下譲受人 と言う) が単数ないしは複数の当該発明(以下当該発明という) に関わる特許権を、自己の名により、合衆国とその属領及び全 ての外国に於いて出願し、特許を受けること;またこの譲渡証 の意図と目的を誠実に実行することを求められた場合、下記に 署名した私/私達が、当該譲受人、その後継者、その被譲渡者、 及び法定代理人の費用負担にて、一部継続出願、継続出願、分 割出願、差替之出願、再発行出願、特許期間延長等を行い、合 法的宣誓書、譲渡証、委任状等の書類を作成し、あらゆる法的 または準法的訴訟手続に於いて証言を行うこと;当該発明とそ の経緯に関連して、下記に署名した私/私達が知り得た全ての 事実を、当該譲受人、後継者、被譲渡者、及び法定代理人に連 絡すること;そして当該譲受人、後継者、被譲渡者、及び法定 代理人が、当該発明の特許権の適切な保護、維持、権利行使す るために望ましいと考慮すること、また、当該発明に関わる特 許出願に際し、当該譲受人、後継者、被譲渡者、及び法定代理 人に対して法的権限を付与することが望ましいと考慮すること について、可能な限り行うことを承諾する。

Assignment

For good and valuable consideration, the receipt of which is hereby acknowledged, I/WE, the undersigned,

Shinichi MIYAZAKI, Hiroyuki YOSHINO, Nobuaki AZAMI, Atsushi OSHIMA, Noritaka IDE, Kunio TABATA,

who have created a certain invention for which an application for United States Letters Patent

\geq	executed by ME/US on even date herewith,
	executed by ME/US on , (respectively),
	filed on and assigned Serial No.
	filed as International Application No. filed on
а	nd entitled:
Ρί	JUSE WIDTH MODULATION CIRCUIT AND LIQUID JET

PULSE WIDTH MODULATION CIRCUIT AND LIQUID JET PRINTING APPARATUS

Do hereby sell, assign and transfer to SEIKO EPSON CORPORATION, having a place of business 4-1, Nishi-shiniuku 2-chome, Shinjuku-ku, Tokyo, Japan its successors, assigns, and legal representatives, the full and exclusive right to said invention and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries; and in and to any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties:

Agree that SEIKO EPSON CORPORATION hereinafter referred to as Assignee, may apply for and receive Letters Patent for said invention and said inventions, hereinafter referred to as said invention, in its own name, in the United States, its territorial possessions, and all foreign countries; and that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said Assignee, its successors, assigns and legal representatives. the undersigned will execute all continuations-in-part. continuations. divisions. substitutes. reissues, extensions thereof, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings; communicate to said Assignee, its successors, assigns or legal representatives all facts known to the undersigned relating to said invention and the history thereof; and generally do everything possible which said Assignee, its successors, assigns, or legal representatives shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said invention and for vesting title to said invention and all applications for patents on said invention in said Assignee, its successors, assigns, or legal representatives; and

そして、私/私達は、この書面により譲渡された権利や財産に影響する、如何なる譲渡、授権、抵当権、ライセンス等その他の協定も他の第三者との間で行っていないこと:下記に署名した私/私達によって、この書面に記載されている権利が所有されていることを、当該譲受人、後継者、被譲渡者、及び法定代理人に対して誓約するものである。

さらに、下記に署名した私/私達はこの譲渡書は英語の部分の表現によってのみ解釈されることに同意する。

上記を証明するため、私/私達は下記日付で署名する。

Govenant with said Assignee, its successors, assigns, or legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

I/WE, the undersigned do further agree that this Assignment is to be construed solely according to the terms of the English language portions thereof.

IN TESTIMONY WHEREOF I/WE have hereunto set MY/OUR signature seal on the date indicated below.

Full name of sole or first inventor Shinichi MIYAZAKI Inventor's signature Shinichi Miyazaki Full name of Second joint inventor, if ar Hiroyuki YOSHINO Second Inventor's signature Hiroyuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZAMI Third Inventor's signature Nabuaki AZAMI Fourth Inventor's signature Casushi OSHIMA Fourth Inventor's signature Casushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE Fifth Inventor's signature	Date 4eptember 30, 2009 Date September 30, 2009
Inventor's signature Shinichi Miyazuki Full name of Second joint inventor, if an Hiroyuki YOSHINO Second Inventor's signature Hiroyuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30, 2009 Date September 30, 2009 Date September 30, 2009 Date September 30, 2009 Date September 30, 2009
Shinichi Miyazuki Full name of Second joint inventor, if ar Hiroyuki YOSHINO Second Inventor's signature Hiroyuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Utsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30, 2009 Date September 30, 2009 Date September 30, 2009 Date September 30, 2009 Date September 30, 2009
Full name of Second joint inventor, if an Hiroyuki YOSHINO Second Inventor's signature Hiroyuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date September 30, 2009 Date September 30, 2009
Hiroyuki YOSHINO Second Inventor's signature Hiroyuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZAMi Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date September 30, 2009 Date September 30, 2009
Second Inventor's signature Hiro Yuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki Azami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date Date Date September 30, 2009 Date September 30, 2009
Hiro Yuki Yoshino Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki Azami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Asushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date Date Date September 30, 2009 Date September 30, 2009
Full name of Third joint inventor, if any Nobuaki AZAMI Third Inventor's signature Nabuaki AZAMi Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Asushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date September 30, 2009
Nobuaki AZAMI Third Inventor's signature Nabuaki Azami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30, 2009 Date September 30, 2009
Third Inventor's signature Nabuati Azam' Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Usushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30,2009 Date September 30,2009
Nabuaki Azami Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Atsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30,2009 Date September 30,2009
Full name of Fourth joint inventor, if an Atsushi OSHIMA Fourth Inventor's signature Utsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30,2009
Atsushi OSHIMA Fourth Inventor's signature Utsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	Date September 30,2009
Fourth Inventor's signature Otsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30,2009
Otsushi Oshima Full name of Fifth joint inventor, if any Noritaka IDE	September 30,2009
Full name of Fifth joint inventor, if any Noritaka IDE	,
Noritaka IDE	Data
	Data
Fifth Inventor's signature	Data
•	Date
Noritaka Ide	September 30, 2009
Full name of Sixth joint inventor, if any	
Kunio TABATA	
Sixth Inventor's signature	Date
Kumo Tabata	September 30, 200
Full name of Seventh joint inventor, if a	any /
Seventh Inventor's signature	Date
Full name of Eighth joint inventor, if an	y .
Eighth Inventor's signature	Date
	Kunio Tabata Full name of Seventh joint inventor, if a Seventh Inventor's signature Full name of Eighth joint inventor, if an

Page 2 of 2