

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Avio Digital, Inc.	06/23/2000
RECEIVING PARTY DATA	
Name:	Centillum Communications, Inc.
Street Address:	47211 Lakeview Boulevard
City:	Fremont
State/Country:	CALIFORNIA
Postal Code:	94538
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	09079914
CORRESPONDENCE DATA	
Fax Number:	(650)938-5200
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
Phone:	4158752444
Email:	rhulse@fenwick.com
Correspondent Name:	Robert A. Hulse
Address Line 1:	801 California Street
Address Line 4:	Mountain View, CALIFORNIA 94041
ATTORNEY DOCKET NUMBER:	21676-05244
NAME OF SUBMITTER:	Robert A. Hulse
Total Attachments: 2	
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CH \$40.00 09079914

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, Avio Digital, a California corporation, having a place of business at 957 Industrial Road, San Carlos, California 94070 ("ASSIGNOR"), has sold, assigned, and transferred and does hereby sell, assign, and transfer to Centillium Communications, Inc., a Delaware corporation, having a place of business at 47211 Lakeview Boulevard, Fremont, California 94538 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following applications ("PATENT RIGHTS"):

Country:	Patent Application Serial No.:	Title:	Filing Date:
US	09/079,914	Synchronous Network For Digital Media Streams	05/15/98
US	60/154,902	System And Methods For The Simultaneous Delivery Of Audio, Video, Telephony, Data, And Home Control Over A Single Wire	09/20/99
US	60/154,902	System And Method Of Network Data Encoding Utilizing Groups Of Five Symbols Having Five Levels Each	09/20/99
US	60/154,902	System And Method Of Digital In-Stream Signaling And Distributed Processing In A Loop Architecture	09/20/99
US	60/154,902	System And Method Of Synchronizing The Time Base Of Devices Connected On A Synchronous Logical Loop Utilizing Bi-Directional Communication To Almost Arbitrary Accuracy	09/20/99
US	60/145,461	Media Access Controller	07/23/99
US	N/A (based on 60/145,461)	System And Method Of Timing Recovery In An Oversampled System In The Presence Of Echo Without Using An Echo Canceller	N/A
US	N/A	Method And Apparatus For Transmitting Digital Data Over Coaxial Cable In A Restricted Bandwidth	N/A

and;

2. The entire worldwide right, title, and interest in and to:
(a) the PATENT RIGHTS, including any right of priority; (b) any divisional, continuation, substitute, renewal, reissue, and other related applications thereto which have been or may be filed in the United States or elsewhere in the world; (c) any patents which may be granted on the applications set forth in (a) and (b) above; and (d) the right to sue in its own name and to recover for past infringement of any or all of any applications or patents issuing therefrom.

ASSIGNOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titled and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER of the above-identified patent applications and Letters Patents; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER of the above-identified patent applications and Letters Patents and for vesting in ASSIGNEE the rights, titles, and interests

herein conveyed. ASSIGNOR further agrees to provide any successor, transferee, assignee, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

ASSIGNOR represents that ASSIGNOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the ASSIGNOR has made or will make hereafter no assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

ASSIGNOR:
Avio Digital, Inc.

By: [Signature]

Print Name: E. BERGEN-H

Title: CEO & PRES

Date: 6/23/00

ASSIGNEE:
Centillum Communications, Inc.

By: [Signature]

Print Name: John Luttala

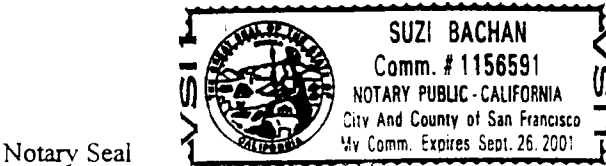
Title: VP & CFO

Date: 6/23/00

State of CALIFORNIA
County of SANTA CLARA

On June 23, 2000 before me, Suzi Bachan personally
[DATE] [NOTARY PUBLIC]
appeared EUGENE BERGEN-H personally known to me or proved to me on the basis of
[ASSIGNOR]

satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that [he/she] executed the same in [his/her] authorized capacity, and that by [his/her] signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

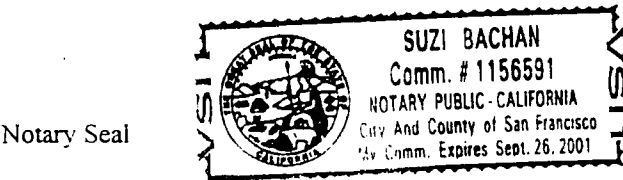


[Signature]
Notary

State of CALIFORNIA
County of SANTA CLARA

On June 23, 2000 before me, Suzi Bachan personally
[DATE] [NOTARY PUBLIC]
appeared JOHN LUTTALA personally known to me or proved to me on the basis of
[ASSIGNEE]

satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that [he/she] executed the same in [his/her] authorized capacity, and that by [his/her] signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



[Signature]
Notary