(Rev 6-93) RI 08 - 20 - 20	SHEET Patent and Trademark Office		
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William SHIEH Vladimir PETRICEVIC Thomas CLARK	DORSAL NETWORKS, INC. 9212 Berger Road Columbia, Maryland 21046 United States of America		
Additional conveying party(ies) NO attached?			
3. Nature of conveyance:  ASSIGNMENT			
Execution Dates:  June 25, 2001	Additional name(s) & address(es) attached? NO		
4. Application number(s) or patent number(s):	Additional manie(s) & address(es) attached:		
If this is being filed together with a new application, the execution date of the application is:			
A. Patent Application Number(s):	B. Patent Number(s):		
09/838,218			
Additional numbers attached? NO			
5. Name and address of party to whom correspondence	_		
concerning document should be mailed:	or rotal named of approaches/patents inverted.		
Johnny A. Kumar FOLEY & LARDNER	7. Total fee (37 C.F.R. § 3.41): \$40.00  X Check Enclosed		
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Johnny A. Kumar Reg. No. 34,649	Johnsylvakumar August 15, 2001		
Name of person signing	Signature Date		
Total number of pages including cover sheet, attachments, and document: 3			

PATENT REEL: 012076 FRAME: 0345

## ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and address of

DORSAL NETWORKS, INC.

9212 Berger Road

assignee Columbia, Maryland, 21046
United States of America

as set forth in this United States Patent Application

its successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries in and to the invention in

title of invention

## A PUMP ASSEMBLY EMPLOYING COUPLED RADIATION SOURCES FOR MULTIPLE FIBERS

check one □ executed concurrently herewith □ executed on □ Serial No. 09/838,218 Filed April 20, 2001

said application for United States Letters Patent, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extensions of Letters Patent granted for said inventions or upon said applications and every priority right that is or may be predicated upon or arise from said inventions, said applications, and said Letters Patent; said Assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said Assignee or otherwise as said Assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents and Trademarks of the United States of America being hereby authorized to issue or transfer all said Letters Patent to said Assignee in accordance herewith: this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right theretofore given, and that the undersigned will do all acts reasonably serving to ensure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said Assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be

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requested by said Assignee, to furnish said Assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

The undersigned hereby grant the firm of FOLEY & LARDNER the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

NAMES AND SIGNATURES OF INVENTORS			
Name: William Shieh	Signature: ( ) Signature:	Date: 6/25/0	
Name: Vladimir Petricevic	Signature: Mordin Petrolema	Date: 6/27/0/	
Name: Thomas Clark	Signature: Marie 1	Date: 6/25/01	
NAMES AND SIGNATURES OF WITNESSES			
Name:	Signature:	Date:	
Name:	Signature:	Date:	

Note: Prima facie evidence of execution may optionally be obtained by execution of this document before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

IPT-407:4/90(1)(modified)

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**PATENT** REEL: 012076 FRAME: 0347