Form **PTO-159**5 (Rev. 03/01)



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OMB No. 0651-0027 (exp. 5/31/2002) 10209	4571			
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Takeo Kanade and Robert Collins	Name: Carnegie Mellon University			
Additional name(s) of conveying party(ies) attached? Yes No	Internal Address:			
Nature of conveyance:				
Assignment				
☐ Security Agreement ☐ Change of Name	Street Address: 5000 Forbes Avenue			
☐ Other	Officer Address. South Office Avenue			
Execution Date: April 12, 2002 and April 15, 2002	City: Pittsburgh State: PA Zip: 15213			
	Additional name(s) and address(es) attached? ☐ Yes No			
4. Application number(a) or notant number(a):				
 Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: 				
A. Patent Application No.(s) 10/074,313	B. Patent No.(s)			
Additional number(s) attached? Yes No				
Name and address of party to whom correspondence concerning document should be mailed.	6. Total number of applications and patents involved:			
Name <u>: Mark G. Knedeisen, Esq.</u>	7. Total fee (37 CFR 3.41)\$ <u>40.00</u>			
Internal Address: <u>Kirkpatrick & Lockhart LLP</u>	ু Enclosed ু			
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PI-845024 v1 0201710-0739

PATENT REEL: 012890 FRAME: 0936

Attorney's Docket No.	010132		PATENT	
		For: For: For:	U.S. and/or Foreign Rights U.S. Application or U.S. Provisional Application U.S. Patent PCT Application ultiple Inventors	S
A	SSIGNMENT OF INVE	ENTION	(MULTIPLE INVENTORS)	
	/ acknowledged, and fo		SSIGNOR of the sum of One D good and valuable consideratio	
			130 Penrose Drive	
Takeo Kanade			Pittsburgh, PA 15208	Japan
(type or print name of inventors	5)		Address	Nationality
Robert Collins		_	1537 Asbury Place Pittsburgh, PA 15217	USA
				
		_		

PI-826968 v1 0201710-0739

PATENT REEL: 012890 FRAME: 0937

ASSIGNEE:	
Carnegie Mellon University (type or print name of ASSIGNEE)	5000 Forbes Avenue Address
(a non-profit Pennsylvania organization) Nationality	Pittsburgh, PA 15213
and the successors, assigns and legal representatives o	f the ASSIGNEE
(complete one of the	ne following)
★ the entire right, title and interest	
and its territorial possessions	%) interest for the United States
(check the following box, if foreign r	ights are also to be assigned)
and in all foreign countries, including all improvements which are disclosed in the invention entitle MANIPULATING THE POINT OF INTEREST IN A SEQ	
(check and complete (a), (b)	, (c), (d), (e), (f) or (g))
and which is found in	
(a) U.S. patent application executed on even da	
(b) U.S. patent application executed on	
(c) U.S. provisional application naming the above	ve inventor(s) for the above-entitled invention
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hereby authorize and request my attorne number when they become known.	f this assignment, I, an ASSIGNOR signing below, y to insert below the filing date and application
(d) ☑ U.S. application no.: 10/074,313 filed on E	ebruary 12, 2002
(e) [] International application no. PCT /	1
(f) [] U.S. patent no.	issuedissued
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(also check (g), if foreign applica	tion(s) is also being assigned)

hereby sells, assigns and transfers to

(Assignment of Invention-Multiple Inventors [16-3.2]-page 2 of 3)

PATENT REEL: 012890 FRAME: 0938 (g) and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or reexamination thereof.

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IN WITNESS WHEREOF, We have hereunto set hand and seal on the date(s) indicated below.

	Signature of INVENTOR Date
Takeo Kanade	(Manade
type name of Inventor)	Signature of INVENTOR Date
- 4 - 6 - 14	Mitt Milli April 15, 2002
Robert Collins type name of Inventor)	Signature of INVENTOR Date
type name of inventory	digitatio of invertible
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	u u Barra Addod
☐ Notarization	or Legalization Page Added.
	table assignment is notarized or legalized, then it will only be
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prima facie evidence of execution. 35 030 2011	• =

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RECORDED: 05/06/2002