# Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2572351

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
BARTLETT W. MEL	10/09/2013
CHAITHANYA A. RAMACHANDRA	10/09/2013

### **RECEIVING PARTY DATA**

Name:	UNIVERSITY OF SOUTHERN CALIFORNIA
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City:	LOS ANGELES
State/Country:	CALIFORNIA
Postal Code:	90015

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13894276

### **CORRESPONDENCE DATA**

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Correspondent Name: MARC E. BROWN

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ATTORNEY DOCKET NUMBER:	028080-0893
NAME OF SUBMITTER:	MARC E. BROWN
Signature:	/Marc E. Brown/

**PATENT** 

**REEL: 031376 FRAME: 0454** 

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Date:	10/09/2013
Total Attachments: 3 source=893Assignment#page1.tif source=893Assignment#page2.tif source=893Assignment#page3.tif	

PATENT REEL: 031376 FRAME: 0455

### ASSIGNMENT

(Joint Inventors)

WHEREAS, we, Bartlett W. Mel and Chaithanya A. Ramachandra, ("ASSIGNORS") have invented "EXTRACTING OBJECT EDGES FROM IMAGES" ("Invention") for which an application for patent ("Application") has been filed in the United States, Application No. 13/894,276, filed May 14, 2013; which claims priority to and incorporates by reference United States Provisional Application No. 61/646, 514, filed May 14, 2012;

WHEREAS, we are the joint inventors of the Invention;

WHEREAS, the University of Southern California, (ASSIGNEE) is a corporation organized and existing under the laws of California having a place of business at USC Stevens Institute for Innovation, 1150 South Olive Street, Suite 2300, Los Angeles, California 90015;

WHEREAS, ASSIGNEE desires to acquire the entire right, title and interest in and to the Invention and Application and to all patents based on the Application;

NOW, THEREFORE, for valuable consideration, the receipt and legal sufficiency of which ASSIGNORS acknowledge, ASSIGNORS have and hereby do assign and transfer to ASSIGNEE, its successors and assigns, the entire right, title and interest in and to:

- 1. The Invention;
- 2. The Application;
- 3. All applications based on or claiming priority from the Application, including all divisionals and continuations ("Application Family");
- 4. All patents which may be granted on the Invention, Application and Application Family by the United States of America, its territories and possessions, and by all foreign countries, including all priority rights and all reissues thereof ("Patents"); and
- 5. The right to sue for past infringement of the Invention, Application, Application Family and Patents.

ASSIGNORS agree, at the request of ASSIGNEE, to sign any and all papers reasonably needed to file and prosecute the Application and Application Family, to obtain the Patents, and to perfect and vest in ASSIGNEE the entire right, title and interest in the Invention, Application, Application Family and Patents. ASSIGNORS also agree to provide assistance that is reasonably needed to prepare and prosecute the Application and Application Family.

ASSIGNORS authorize and empower ASSIGNEE, its successors and assigns, to apply for and obtain, in its own name, the Application, Application Family and Patents before competent International Authorities, including the World Intellectual Property Organization and

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PATENT REEL: 031376 FRAME: 0456

obtained.		
Dated: $10/q$ , 2013	Name: BARTLETT W. MEL Address: 441 2nd Street Manhattan Beach, California 902	
I certify that I am over the age of	18 and that the individual named above si	gned this document
in my precence		
Maria Carreiva (Print) Name	Main Carreum Signature of Witness	16-9-20 B Date
441 2nd st.		
Manhattan Beach,	CA 90266	
Witness Address (Print or Type)		
Dated:, 2013	Name: CHAITHANYA A. RAM	A CULANIDO A
	Address: 6220 Owensmouth Ave Woodland Hills, California 9136'	nue, Apt. 265
I certify that I am over the age of in my presence.	18 and that the individual named above sig	gned this document
(Print) Name	Signature of Witness	Date
	·	
Witness Address (Print or Type)		

in any and all foreign countries in which applications for patents can be made or patents

I certify that I am over the age of 18 and that the individual named above signed this docume in my presence.  [Print] Name   Signature of Witness   Date    Witness Address (Print or Type)    Dated: 10   9   2013    Name: CHATHANYAL. RAMACHANDRA Address: 6220 Owensmouth Avenue, Apt. 265 Woodland Hills, California 91367    I certify that I am over the age of 18 and that the individual named above signed this docume in my presence.  SHWINI MUNDYA   10   9   2.  (Print) Name   Signature of Witness   Date    6220 OWENS MOUTH AVE    44265, WOODLAND HILLS    CA - 91367	Dated:, 2013	Name: BARTLETT W. MEI Address: 441 2nd Street Manhattan Beach, California	
Witness Address (Print or Type)  Dated: 10 9 , 2013  Name: CHATHANYALA. RAMACHANDRA Address: 6220 Owensmouth Avenue, Apt. 265 Woodland Hills, California 91367  I certify that I am over the age of 18 and that the individual named above signed this docume in my presence.  SHWINI MUNDYA  (Print) Name  Signature of Witness  Date		of 18 and that the individual named above	ve signed this documen
Dated: 10 9 , 2013  Name: CHAFTHANYALA. RAMACHANDRA Address: 6220 Owensmouth Avenue, Apt. 265 Woodland Hills, California 91367  I certify that I am over the age of 18 and that the individual named above signed this docume in my presence.  SHWINI MUNDYA  (Print) Name  Signature of Witness  Date	(Print) Name	Signature of Witness	Date
Dated: 10 9 , 2013  Name: CHATTHANYAIA. RAMACHANDRA Address: 6220 Owensmouth Avenue, Apt. 265 Woodland Hills, California 91367  I certify that I am over the age of 18 and that the individual named above signed this docume in my presence.  SHWINI MUNDYA  (Print) Name  Signature of Witness  Date 6220 OWENS MOUTH AVE			
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in my presence.  SHWINI MUNDYA  (Print) Name  Signature of Witness  Date  6220 OWENS MOUTH AVE		Address: 6220 Owensmouth	Avenue, Apt. 265
(Print) Name Signature of Witness Date 6220 OWENS MOUTH AVE		of 18 and that the individual named abov	e signed this documen
6220 OWENS MOUTH AVE	SHWINI MUNDYA	Sund	10/9/20
	(Print) Name	Signature of Witness	Date
# 265, WOODLAND HILLS			
	#265, WOODLAN)	HILLS	
	Witness Address (Print or Type)		