PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

Stylesheet Version v1.2

EPAS ID: PAT3502283

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZHENG ZHAO	02/25/2015
JUN LIU	02/25/2015
JAMES ALLEN COX	02/25/2015

RECEIVING PARTY DATA

Name:	SAS INSTITUTE INC.
Street Address:	SAS CAMPUS DRIVE
City:	CARY
State/Country:	NORTH CAROLINA
Postal Code:	27513

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14834365	

CORRESPONDENCE DATA

Fax Number: (202)204-5622

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 202-639-4720

Email: vward@kilpatricktownsend.com

Correspondent Name: MATT KITCES

Address Line 1: TWO EMBARCADERO CENTER, EIGHTH FLOOR

Address Line 4: SAN FRANCISCO, CALIFORNIA 94111-3834

ATTORNEY DOCKET NUMBER:	94926-025600US-941077	
NAME OF SUBMITTER:	MATTHEW T. KITCES	
SIGNATURE:	/Matthew T. Kitces/	
DATE SIGNED:	08/27/2015	

Total Attachments: 4

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif

PATENT 503455658 REEL: 036440 FRAME: 0253

ASSIGNMENT

WHEREAS, one or more inventions have been made by the undersigned in

USING HEMISPHERE CONSTRAINTS TO IDENTIFY INACTIVE FEATURES FOR ACCELERATING SPARSE SUPPORT VECTOR MACHINE TRAINING IN MODEL SELECTION

and are the subject of a patent application filed in the United States Patent and Trademark Office on March 24, 2015, under Application Serial No. 62/137,768, which application is identified as SAS Docket No. SAS-100030PP1-US.

WHEREAS, SAS INSTITUTE INC., a North Carolina corporation, located and doing business at SAS Campus Drive, Cary, North Carolina 27513, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest in said inventions and patent rights therefor throughout the world.

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, THE UNDERSIGNED HEREBY SELLS, ASSIGNS, TRANSFERS. AND DELIVERS TO ASSIGNEE all right, title, and interest, in the United States and throughout the world, in said inventions and all patents, patent rights, patent applications, and inventor's certificates for said inventions, including without limitation said application for patent in the United States and all provisionals, divisions, continuations, continuations-in-part, and resulting patents, all right to sue for infringement or past infringement, and all patents and patent rights that may be granted for said inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary or desirable to secure for or vest in assignee, its successors or assigns, any invention right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Patent and Trademark Office is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in the patents, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in the patents.

The undersigned hereby grants SAS Institute Inc. the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

PATENT REEL: 036440 FRAME: 0254 IN WITNESS WHEREOF, this Assignment has been executed below by the undersigned:

ZHENG "ALAN" ZHAO

Post Office Address: 4024 Strendal Drive

2 - 25 - 2015 Date

Cary, North Carolina 27519

STATE OF NORTH CAROLINA

} 8s.

COUNTY OF WAKE

ZHENG "ALAN" ZHAO appeared before me this and acknowledged that the foregoing instrument was executed as his free act and deed for the uses and purposes set forth therein.

Uncada M. Lester Notary Public Wake County North Carolina

Notary Public: Uneada M. Léster

My Commission Expires: July 25, 2019

66722405V.1

IN WITNESS WHEREOF, this Assignment has been executed below by the undersigned: 2215 (2/2) JUN LIU Date Post Office Address: 506 Gallberry Drive Cary, North Carolina 27519 STATE OF NORTH CAROLINA) ss. COUNTY OF WAKE day of February, 2015, and acknowledged JUN LIU appeared before me this that the foregoing instrument was executed as his free act and deed for the uses and purposes set forth therein. Uncada M. Lesser Notary Public Notary Public: Uneada M. Lester Wake County North Carolina My Commission Expires: July 25, 2019

1. 100		2-25-245	
JAMES ALLEN CO	X	Date	
Post Office Address:	207 Battery Point Place Cary, North Carolina 275	13	
STATE OF NORTH	} :	§\$.	
COUNTY OF WAKE	}		
JAMES ALL acknowledged that the purposes set forth the	EN COX appeared before foregoing instrument was rein.		y of February, 2015, and and deed for the uses and
Uncada M. I. Notary Pal Wake Cow North Caro	Notary Pu	blic: Uneada M. Lester	4/

My Commission Expires: July 25, 2019

RECORDED: 08/27/2015

IN WITNESS WHEREOF, this Assignment has been executed below by the undersigned:

PATENT REEL: 036440 FRAME: 0257