#### 11/11/2019 505765998

### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5812814

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ELAD AMRANI	10/30/2019
UDI BARZELAY	11/03/2019
RAMI BEN-ARI	11/10/2019
TAL HAKIM	10/30/2019

#### **RECEIVING PARTY DATA**

Name:	International Business Machines Corporation
Street Address:	New Orchard Road
City:	Armonk
State/Country:	NEW YORK
Postal Code:	10504

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16672545

#### **CORRESPONDENCE DATA**

Fax Number: (914)945-3281

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.

Email: HRL IPDEPARTMENT@il.ibm.com

Correspondent Name: SUZANNE EREZ Address Line 1: PO BOX 218

Address Line 2: IP LAW DEPARTMENT

Address Line 4: YORKTOWN HEIGHTS, NEW YORK 10598

ATTORNEY DOCKET NUMBER:	P201904779US01
NAME OF SUBMITTER:	EYAL GILBOA
SIGNATURE:	/Eyal Gilboa/
DATE SIGNED:	11/11/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

**Total Attachments: 5** 

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**PATENT** REEL: 050964 FRAME: 0973

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PATENT REEL: 050964 FRAME: 0974

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# DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

Title of Invention:

## SELF-SUPERVISED OBJECT DETECTOR TRAINING USING RAW AND UNLABELED VIDEOS

This declaration is directed to the attached application, or (if following box is checked):

The above-identified application was made or authorized to be made by me.

As a below named inventor, I hereby declare that:

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document:

Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In light of the good and valuable consideration acknowledged above, I agree that I will not be compensated, nor am I entitled to any other consideration beyond that already compensated to me by IBM or might be further compensated to me at IBM's sole discretion and good will. I waive my rights to any additional consideration and confirm that the above forms an agreement between me and IBM for the purpose of Section 134 to Israel's Patents Law.

In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors,

legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

(1)	Legal Name of Inventor: ELAD AMRANI	
	Signature:	Date: 30/10/2019
(2)	Legal Name of Inventor: UDI BARZELAY	
	Signature:	Date:
(3)	Legal Name of Inventor: RAMI BEN-ARI	
	Signature:	Date:
(4)	Legal Name of Inventor: TAL HAKIM	
	Signature:	Date:

legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

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(1)	Legal Name of Inventor: ELAD AMRANI	
	Signature:	Date
(2)	Legal Name of Inventor: UDI BARZELAY	
	Signature:	Date: 11/03/2019
(3)	Legal Name of Inventor: RAMI BEN-ARI	
	Signature:	Date:
(4)	Legal Name of Inventor: TAL HAKIM	
	Signature:	Date:

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(1) Legal Name of Inventor: ELAD AMRANI	
Signature:	Date:
(2) Legal Name of Inventor: UDI BARZELAY	
Signature:	Date
(3) Legal Name of Inventor: RAMI REN-ARI	
Signature: <u>Romi Bh. Are'</u>	Date: 11,10,2019
(4) Legal Name of Inventor: TAL HAKIM	
Signature:	Dates

IBM DOCKET NUMBER: P201904779 CSOI

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(1) Legal Name of Inventor; ELAD AMRANI	
Signature:	Date:
(2) Legal Name of Inventor: UDI BARZELAY	
Signature:	Date:
(3) Legal Name of Inventor: RAMI BEN-ARI	
Signature:	Date:
(4) Legal Name of Inventor, TAL HAKIM	
Signature: Tal Hakim	Date: October, 30, 2019

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