

PCT

REQUEST

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

PCT/US18/17090

International Application No.

06 FEB 2018(06.02.18)

International Filing Date

PCT INTERNATIONAL
APPLICATION RO/US

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference
(if desired) (12 characters maximum) 119314-8012.WO01

Box No. I TITLE OF INVENTION	
ITERATIVE MULTI-LEVEL EQUALIZATION AND DECODING	
Box No. II APPLICANT <input type="checkbox"/> This person is also inventor	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) COHERE TECHNOLOGIES 2550 Walsh Avenue, Suite 150 Santa Clara, CA 95051 United States of America	Telephone No. Facsimile No. Applicant's registration No. with the Office
E-mail authorization: Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so. <input type="checkbox"/> as advance copies followed by paper notifications; or <input checked="" type="checkbox"/> exclusively in electronic form (no paper notifications will be sent). E-mail address: patentprocurement@perkinscoie.com	
State (that is, country) of nationality: US	State (that is, country) of residence: US
This person is applicant for the purposes of: <input checked="" type="checkbox"/> all designated States <input type="checkbox"/> the States indicated in the Supplemental Box	
Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)	
<input checked="" type="checkbox"/> Further applicants and/or (further) inventors are indicated on a continuation sheet.	
Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE	
The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: <input checked="" type="checkbox"/> agent <input type="checkbox"/> common representative	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) SATHE, Vinay PERKINS COIE LLP P.O. Box 1247 Seattle, WA 98111-1247 United States of America	Telephone No. 858-720-5700 Facsimile No. 858-720-5799 Agent's registration No. with the Office 55595
E-mail authorization: Marking one of the check-boxes below authorizes the receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority to use the e-mail address indicated in this Box to send, notifications issued in respect of this international application to that e-mail address if those offices are willing to do so. <input type="checkbox"/> as advance copies followed by paper notifications; or <input checked="" type="checkbox"/> exclusively in electronic form (no paper notifications will be sent). E-mail address: patentprocurement@perkinscoie.com	
<input type="checkbox"/> Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.	

Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)

If none of the following sub-boxes is used, this sheet should not be included in the request.

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

KONS, Shachar
 2550 Walsh Avenue, Suite 150
 Santa Clara, CA 95051
 United States of America

This person is:

- applicant only
- applicant and inventor
- inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of:

- all designated States
- the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

HADANI, Ronny
 2550 Walsh Avenue, Suite 150
 Santa Clara, CA 95051
 United States of America

This person is:

- applicant only
- applicant and inventor
- inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of:

- all designated States
- the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

IBARS CASAS, Christian
 2550 Walsh Avenue, Suite 150
 Santa Clara, CA 95051
 United States of America

This person is:

- applicant only
- applicant and inventor
- inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of:

- all designated States
- the States indicated in the Supplemental Box

Name and address: *(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)*

(This section is blank in the image)

This person is:

- applicant only
- applicant and inventor
- inventor only *(If this check-box is marked, do not fill in below.)*

Applicant's registration No. with the Office

State *(that is, country)* of nationality:

State *(that is, country)* of residence:

This person is applicant for the purposes of:

- all designated States
- the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on another continuation sheet.

Supplemental Box

If the Supplemental Box is not used, this sheet should not be included in the request.

1. If, in any of the Boxes, except Boxes Nos. VIII(i) to (v) for which a special continuation box is provided, the space is insufficient to furnish all the information: in such case, write "Continuation of Box No...." (indicate the number of the Box) and furnish the information in the same manner as required according to the captions of the Box in which the space was insufficient, in particular:

(i) if more than one person is to be indicated as applicant and/or inventor and no "continuation sheet" is available: in such case, write "Continuation of Box No. III" and indicate for each additional person the same type of information as required in Box No. III. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below;

(ii) if, in Box No. II or in any of the sub-boxes of Box No. III, the indication "the States indicated in the Supplemental Box" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is applicant;

(iii) if, in Box No. II or in any of the sub-boxes of Box No. III, the inventor or the inventor/applicant is not inventor for the purposes of all designated States: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Boxes No. II and No. III" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;

(iv) if, in addition to the agent(s) indicated in Box No. IV, there are further agents: in such case, write "Continuation of Box No. IV" and indicate for each further agent the same type of information as required in Box No. IV;

(v) if, in Box No. VI, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No. VI" and indicate for each additional earlier application the same type of information as required in Box No. VI.

2. If the applicant intends to make an indication of the wish that the international application be treated, in certain designated States, as an application for a patent of addition, certificate of addition, inventor's certificate of addition or utility certificate of addition: in such case, write the name or two-letter code of each designated State concerned and the indication "patent of addition," "certificate of addition," "inventor's certificate of addition" or "utility certificate of addition," the number of the parent application or parent patent or other parent grant and the date of grant of the parent patent or other parent grant or the date of filing of the parent application (Rules 4.11(a)(i) and 49bis.1(a) or (b)).

3. If the applicant intends to make an indication of the wish that the international application be treated, in the United States of America, as a continuation or continuation-in-part of an earlier application: in such case, write "United States of America" or "US" and the indication "continuation" or "continuation-in-part" and the number and the filing date of the parent application (Rules 4.11(a)(ii) and 49bis.1(d)).

Continuation of Box IV:

Bing Ai, Reg. No. 43,312
 Babak Tehranchi, Reg. No. 55,937
 Vinay Sathe, Reg. No. 55,595
 Yang Tang, Reg. No. 55,663
 Fareid Asphahani, Reg. No. 72,217
 David Laney, Reg. No. 66,859

Continuation of Box VI

item (4)

Filing Date	Application No.	Country
24/08/2016	62/379,184	US
24 August 2016		

Box No. V DESIGNATIONS				
<p>The filing of this request constitutes under Rule 4.9(a) the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.</p> <p>However,</p> <p><input type="checkbox"/> DE Germany is not designated for any kind of national protection</p> <p><input type="checkbox"/> JP Japan is not designated for any kind of national protection</p> <p><input type="checkbox"/> KR Republic of Korea is not designated for any kind of national protection</p> <p><i>(The check-boxes above may only be used to exclude (irrevocably) the designations concerned if, at the time of filing or subsequently under Rule 26bis.1, the international application contains in Box No. VI a priority claim to an earlier national application filed in the particular State concerned, in order to avoid the ceasing of the effect, under the national law, of this earlier national application.)</i></p>				
Box No. VI PRIORITY CLAIM AND DOCUMENT				
The priority of the following earlier application(s) is hereby claimed:				
Filing date of earlier application <i>(day/month/year)</i>	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application: regional Office	international application: receiving Office
item (1) 06/02/2018 06 February 2018	15/889,867	US		
item (2) 11/08/2017 11 August 2017	PCT/US2017/0466 34			US
item (3) 12/08/2016 12 August 2016	62/374,585	US		
<input checked="" type="checkbox"/> Further priority claims are indicated in the Supplemental Box.				
Furnishing the priority document(s):				
<input checked="" type="checkbox"/> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) <i>(only if the earlier application(s) was filed with the receiving Office which, for the purposes of this international application, is the receiving Office)</i> identified above as: <p><input type="checkbox"/> all items <input checked="" type="checkbox"/> item (1) <input type="checkbox"/> item (2) <input checked="" type="checkbox"/> item (3) <input checked="" type="checkbox"/> other, see Supplemental Box</p>				
<input checked="" type="checkbox"/> The International Bureau is requested to obtain from a digital library a certified copy of the earlier application(s) identified above, using, where applicable, the access code(s) indicated below <i>(if the earlier application(s) is available to it from a digital library)</i> : <p><input type="checkbox"/> item (1) <input checked="" type="checkbox"/> item (2) <input type="checkbox"/> item (3) <input type="checkbox"/> other, see Supplemental Box</p> <p>access code _____ access code _____ access code _____</p>				
Restore the right of priority: the receiving Office is requested to restore the right of priority for the earlier application(s) identified above or in the Supplemental Box as item(s) (_____). <i>(See also the Notes to Box No. VI; further information must be provided to support a request to restore the right of priority.)</i>				
Incorporation by reference: where an element of the international application referred to in Article 11(1)(iii)(d) or (e) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more elements referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confirmation under Rule 20.6, incorporated by reference in this international application for the purposes of Rule 20.6.				
Box No. VII INTERNATIONAL SEARCHING AUTHORITY				
Choice of International Searching Authority (ISA) <i>(if more than one International Searching Authority is competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):</i> ISA/ <u>US</u>				

Continuation of Box No. VII USE OF EARLIER SEARCH AND CLASSIFICATION RESULTS		
1. Request by the applicant under Rule 4.12		
1.1 <input type="checkbox"/> The ISA indicated in Box No. VII is requested to take into account the results of the earlier search(es) indicated below (see also Notes to Continuation of Box No. VII, item 1; use of results of more than one earlier search)		
Filing date (day/month/year)	Application Number	Country (or regional Office)
<input type="checkbox"/> Statement (Rule 4.12(ii)): this international application is the same, or substantially the same, as the application in respect of which the earlier search was carried out except, where applicable, that it is filed in a different language.		
1.2 Submission of the earlier search results, where necessary*		
<input type="checkbox"/> Availability of documents (Rules 12bis.1(c) and (d) and 12bis.2(b)): the following documents are available to the ISA in a form and a manner acceptable to it, and therefore DO NOT need to be submitted by the applicant to the receiving Office, or to the ISA.		
<input type="checkbox"/> a copy of the results of the earlier search,		
<input type="checkbox"/> a copy of the earlier application,		
<input type="checkbox"/> a translation of the earlier application into a language which is accepted by the ISA,		
<input type="checkbox"/> a translation of the results of the earlier search into a language which is accepted by the ISA,		
<input type="checkbox"/> a copy of any document cited in the earlier search results (if known, please indicate below the documents available to the ISA):		
<input type="checkbox"/> Request from the applicant to the receiving Office to transmit to the ISA a copy of the earlier search results (Rule 12bis.1(b) and (d)): (where the earlier search was not carried out by the ISA indicated in Box No. VII but by the same Office as that which is acting as receiving Office; or where the earlier search results are otherwise available to the receiving Office): the applicant requests the receiving Office to prepare and transmit to the ISA a copy of the earlier search results.		
* The applicant only needs to furnish a copy of the earlier search results to the receiving Office, or the ISA, if none of the scenarios mentioned under item 1 applies. (See item 10 in the check-list and also Notes to Continuation of Box No. VII, item 1).		
<input type="checkbox"/> Further earlier searches are indicated on a continuation sheet.		
2. Transmission of the earlier search and classification results to the ISA by the receiving Office where the applicant DID NOT make a request under Rule 4.12		
2.1 Where the international application claims priority of an earlier application, subject to Article 30(2)(a) and (3), the receiving Office:		
– shall transmit a copy of the earlier search and classification results to the ISA (unless such copy is already available to the ISA), where the earlier application was filed with the same Office as that which is acting as the receiving Office and that Office has carried out the earlier search in respect of the earlier application (Rule 23bis.2(a));		
– may transmit such a copy if the earlier application was filed with a different Office, but where the results of that earlier search and classification are nevertheless available to the receiving Office (Rule 23bis.2(c)).		
However, where the applicant did not request the receiving Office to transmit to the ISA a copy of the earlier search results under Rule 4.12 (see above item 1), in respect of an earlier search carried out on the following earlier application, the priority of which is subsequently claimed in this international application, the applicant may consider (see also Notes to Continuation of Box No. VII, item 2; use of more than one earlier search):		
Filing date (day/month/year)	Application Number	Country (or regional Office)
2.2 Request not to transmit the earlier search results by the receiving Office to the ISA (Rule 23bis.2(b))		
<input type="checkbox"/> to request that the receiving Office DOES NOT transmit the results of the earlier search to the ISA (Rule 23bis.2(b)) (may only be checked where the international application is filed with the following receiving Offices: DE, FI and SE)		
2.3 Authorization to transmit the earlier search and classification results by the receiving Office to the ISA (Rule 23bis.2(a) and (e))		
<input type="checkbox"/> to authorize the receiving Office to transmit the results of the earlier search and classification to the ISA (Rule 23bis.2(e)) (may only be checked where the international application is filed with the following receiving Offices: AU, CH, CZ, FI, HU, IL, JP, NO, SE, SG and US)		
<input type="checkbox"/> to authorize the receiving Office to transmit the results of the earlier international search and classification to the ISA (Rule 23bis.2(a) and Article 30(2)(a) and (3)) (may only be checked where the earlier search concerns an international application , the priority of which is subsequently claimed in this international application and where the earlier international search was carried out by a different ISA than the ISA chosen in Box No. VII)		
<input type="checkbox"/> Further earlier searches are indicated on a continuation sheet.		
Box No. VIII DECLARATIONS		
The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):		Number of declarations
<input type="checkbox"/>	Box No. VIII (i) Declaration as to the identity of the inventor	:
<input checked="" type="checkbox"/>	Box No. VIII (ii) Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent	: 1
<input type="checkbox"/>	Box No. VIII (iii) Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	:
<input type="checkbox"/>	Box No. VIII (iv) Declaration of inventorship (only for the purposes of the designation of the United States of America)	:
<input type="checkbox"/>	Box No. VIII (v) Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	:

Box No. IX CHECK LIST for EFS-Web filings - this sheet is only to be used when filing an international application with RO/US via EFS-Web

This international application contains the following:	Number of sheets	This international application is accompanied by the following item(s) (<i>mark the applicable check-boxes below and indicate in right column the number of each item</i>):	Number of items
(a) request form PCT/RO/101 (including any declarations and supplemental sheets) :	7	1. <input type="checkbox"/> fee calculation sheet :	1
(b) description (excluding any sequence listing part of the description, see (f), below) :	10	2. <input type="checkbox"/> original separate power of attorney :	
(c) claims :	5	3. <input type="checkbox"/> original general power of attorney :	
(d) abstract :	1	4. <input type="checkbox"/> copy of general power of attorney; reference number: :	
(e) drawings (if any) :	10	5. <input type="checkbox"/> priority document(s) identified in Box No. VI as item(s) :	
(f) sequence listing part of the description in the form of an image file (e.g. PDF) :		6. <input type="checkbox"/> Translation of international application into (<i>language</i>): :	
Total number of sheets (including the sequence listing part of the description if filed as an image file) :	33	7. <input type="checkbox"/> separate indications concerning deposited microorganism or other biological material :	
(g) sequence listing part of the description		8. <input type="checkbox"/> (<i>only where item (f) is marked in the left column</i>) copy of the sequence listing in electronic form (Annex C/ST.25 text file) not forming part of the international application but furnished only for the purposes of international search under Rule 13ter :	
<input type="checkbox"/> filed in the form of an Annex C/ST.25 text file		9. <input type="checkbox"/> (<i>only where item (f) (in the left column) and item 8 (above) are marked</i>) a statement confirming that "the information recorded in electronic form submitted under Rule 13ter is identical to the sequence listing as contained in the international application" as filed via EFS-Web: :	
<input type="checkbox"/> WILL BE filed separately on physical data carrier(s), on the same day and in the form of an Annex C/ST.25 text file		10. <input type="checkbox"/> copy of results of earlier search(es) (Rule 12bis.1(a)) :	
Indicate type and number of physical data carrier(s) :		11. <input type="checkbox"/> other (<i>specify</i>): :	

Figure of the drawings which should accompany the abstract: FIG. 10	Language of filing of the international application: English
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Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE
Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).

/Vinay Sathe/
 Vinay Sathe, Agent for Applicant
 Attorney Reg. No. 55,595
 PERKINS COIE LLP

For receiving Office use only	
1. Date of actual receipt of the purported international application: 06 FEB 2018(06.02.18)	2. Drawings: <input type="checkbox"/> received: <input type="checkbox"/> not received:
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:	
4. Date of timely receipt of the required corrections under PCT Article 11(2):	
5. International Searching Authority (if two or more are competent): ISA / US	6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid

For International Bureau use only

Date of receipt of the record copy by the International Bureau: