

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6577281

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HEINER KIRCHHOFFER	01/27/2021
JAN STEGEMANN	02/07/2021
DETLEV MARPE	01/19/2021
PAUL HAASE	01/28/2021
STEFAN MATLAGE	01/20/2021
CHRISTIAN BARTNIK	01/25/2021
HEIKO SCHWARZ	01/29/2021
THOMAS WIEGAND	01/20/2021
RECEIVING PARTY DATA	
Name:	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
Street Address:	HANSASTRASSE 27C
City:	MUNICH
State/Country:	GERMANY
Postal Code:	80686
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17142071
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	650-838-4300
Email:	Patentprocurement@perkinscoie.com, jpallach@perkinscoie.com
Correspondent Name:	PERKINS COIE LLP - PAO GENERAL
Address Line 1:	P.O. BOX 1247
Address Line 4:	SEATTLE, WASHINGTON 98111-1247
ATTORNEY DOCKET NUMBER:	110971-9480.US01
NAME OF SUBMITTER:	JESSICA PALLACH
SIGNATURE:	/Jessica Pallach/

DATE SIGNED:	03/01/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 12 source=110971-9480US01--DeclAssign#page1.tif source=110971-9480US01--DeclAssign#page2.tif source=110971-9480US01--DeclAssign#page3.tif source=110971-9480US01--DeclAssign#page4.tif source=110971-9480US01--DeclAssign#page5.tif source=110971-9480US01--DeclAssign#page6.tif source=110971-9480US01--DeclAssign#page7.tif source=110971-9480US01--DeclAssign#page8.tif source=110971-9480US01--DeclAssign#page9.tif source=110971-9480US01--DeclAssign#page10.tif source=110971-9480US01--DeclAssign#page11.tif source=110971-9480US01--DeclAssign#page12.tif	

HHI 2 - 2018P61756WOUS
ATTORNEY DOCKET NUMBER: 110971-9480.US01; FH190706PUS

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

Title of Invention: ARITHMETIC ENCODERS, ARITHMETIC DECODERS, VIDEO ENCODER,
VIDEO DECODER, METHODS FOR ENCODING, METHODS FOR DECODING
AND COMPUTER PROGRAM

As a below named inventor, I hereby declare that:

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

United States application or PCT application number 17/142,071 filed on January 5, 2021.

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

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 C.F.R. 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 Attorney Docket Number provided above in the header of this document;

Whereas, Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V., a corporation duly organized under and pursuant to the laws of Germany, having its principal place of business at Hansastrasse 27c, Munich, Germany, 80686, desires to acquire and each undersigned inventor desires to grant to Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V., 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 one dollar (\$1.00) and good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor, hereinafter referred to as ASSIGNOR, hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V., hereinafter referred to as 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 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 the Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by the Assignee, 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, without charge to said

Assignee but at the Assignee's expense, 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 Assignee, its successors, legal representatives, and assigns, whenever requested by the Assignee, its successors, legal representatives, or assigns.

ASSIGNOR(S) grants the attorney of record the power to insert on this Assignment any further identification that 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.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to the Assignee 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 the assignee, 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 may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

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: Heiner KIRCHHOFFER

Signature: [Handwritten Signature] Date: 27.1.2021

2) Legal Name of Inventor: Jan STEGEMANN

Signature: _____ Date: _____

3) Legal Name of Inventor: Detlev MARPE

Signature: _____ Date: _____

4) Legal Name of Inventor: Paul HAASE

Signature: _____ Date: _____

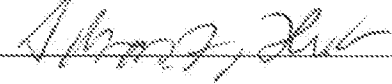
5) Legal Name of Inventor: Stefan MATLAGE

Signature: _____ Date: _____

6) Legal Name of Inventor: Christian BARTNIK

Signature:  Date: 25/01/2021

7) Legal Name of Inventor: Heiko SCHWARZ

Signature:  Date: 29/01/2021

8) Legal Name of Inventor: Thomas WIEGAND

Signature:  Date: 20 JAN 2021

HHI 2 - 2018P61756WOUS
ATTORNEY DOCKET NUMBER: 110971-9480.US01; FH190706PUS

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Title of Invention: ARITHMETIC ENCODERS, ARITHMETIC DECODERS, VIDEO ENCODER,
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AND COMPUTER PROGRAM

As a below named inventor, I hereby declare that:

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United States application or PCT application number 17/142,071 filed on January 5, 2021.

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

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

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Now, therefore, for one dollar (\$1.00) and good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor, hereinafter referred to as ASSIGNOR, hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to Fraunhofer-Gesellschaft zur Foerderung der angewandten Forschung e.V., hereinafter referred to as 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 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 the Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by the Assignee, 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, without charge to said

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1) Legal Name of Inventor: Heiner KIRCHHOFFER

Signature: _____ Date: _____

2) Legal Name of Inventor: Jan STEGEMANN

Signature: *Jan Stegemann* _____ Date: 07.02.21

3) Legal Name of Inventor: Detlev MARPE

Signature: _____ Date: _____

4) Legal Name of Inventor: Paul HAASE

Signature: _____ Date: _____

5) Legal Name of Inventor: Stefan MATLAGE

Signature: _____ Date: _____

6) Legal Name of Inventor: Christian BARTNIK

Signature: Date:

7) Legal Name of Inventor: Heiko SCHWARZ

Signature: Date:

8) Legal Name of Inventor: Thomas WIEGAND

Signature: Date:

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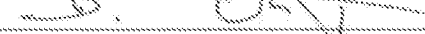
1) Legal Name of Inventor: Heiner KIRCHHOFFER

Signature: Date:

2) Legal Name of Inventor: Jan STEGEMANN

Signature: Date:

3) Legal Name of Inventor: Detlev MARPE

Signature:  Date: 13/01/2021

4) Legal Name of Inventor: Paul HAASE

Signature:  Date: 28.11.2011

5) Legal Name of Inventor: Stefan MATLAGE

Signature: Date:

6) Legal Name of Inventor: Christian BARTNIK

Signature: Date:

7) Legal Name of Inventor: Heiko SCHWARZ

Signature: Date:

8) Legal Name of Inventor: Thomas WIEGAND

Signature: Date:

HHI 2 - 2018P61756WOUS
ATTORNEY DOCKET NUMBER: 110971-9480.US01; FH190796PUS

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Signature: _____ Date: _____

2) Legal Name of Inventor: Jan STEGEMANN

Signature: _____ Date: _____

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Signature: _____ Date: _____

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Signature: _____ Date: _____

5) Legal Name of Inventor: Stefan MATLAGE

Signature: *Stefan Matlage* _____ Date: *10.1.21*

6) Legal Name of Inventor: Christian BARTNIK

Signature: Date:

7) Legal Name of Inventor: Heiko SCHWARZ

Signature: Date:

8) Legal Name of Inventor: Thomas WIEGAND

Signature: Date: