PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6380715

| NATURE OF CONVEYANCE: Corrective Assignment to correct the TITLE previously recorded on Reel 053831 Frame 0607. Assignor(s) hereby confirms the THE CORRECT TITLE IS GLASS CERAMIC SINTERED BODY AND WIRING SUBSTRATE. | SU | JBMISSION TYPE: | CORRECTIVE ASSIGNMENT |
|---|-----|----------------------|--|
| | N.A | ATURE OF CONVEYANCE: | 053831 Frame 0607. Assignor(s) hereby confirms the THE CORRECT TITLE IS GLASS CERAMIC SINTERED BODY AND WIRING |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| Shin TAKANE | 07/16/2020 |
| Yousuke FUTAMATA | 07/16/2020 |
| Yasuharu MIYAUCHI | 07/16/2020 |

RECEIVING PARTY DATA

| Name: | TDK CORPORATION |
|--|-----------------|
| Street Address: 2-5-1, Nihonbashi, Chuo-ku | |
| City: | Tokyo |
| State/Country: | Japan |
| Postal Code: | 103-6128 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16923531 |

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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: 703-836-6400 Email: email@oliff.com **Correspondent Name:** JESSE O. COLLIER

OLIFF PLC Address Line 1: P.O. BOX 320850 Address Line 2:

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

| ATTORNEY DOCKET NUMBER: | 192843 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | CAMILLE MALHOTRA |
| SIGNATURE: | /Camille Malhotra/ |
| DATE SIGNED: | 11/02/2020 |
| | |

Total Attachments: 6

PATENT REEL: 054279 FRAME: 0568

506333964



PATENT REEL: 054279 FRAME: 0569

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e))

For Application with Filing Date on or after September 16, 2012

2012 年 9 月 16 日以降の日付で提出する出願における (37 CFR 1.63(e)に基づき兼用で提出する)譲渡証

Japanese Language Assignment

| (1-8) | Insert Legal Name(s) of Inventor(s) 発明者の氏名を記入すること | |
|----------|---|--|
| (1) | Shin TAKANE | |
| (2) | Yousuke FUTAMATA | |
| (3) | Yasuharu MIYAUCHI | |
| (4) | | |
| (5) | | |
| (6) | | |
| (7) | | |
| (8) | | |
| (9) | | |
| (10) | | |
| その金 | 他の適切な有価約因を考慮して、各々の署名人は、 額および他の約因を受理したこと、またその金額 他の約因が充分であることを確認し、 | (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which are hereby acknowledged, each undersigned agrees to assign, and hereby does assign, transfer and set over to |
| (9) | Insert Name of Assignee | |
| (9) | 譲受人氏名を記入すること TDK Corporation | |
| (10) | Insert Address of Assignee | |
| , | 譲受人住所を記入すること | |
| (10) | 2-5-1, Nihonbashi, Chuo-ku, Tokyo 103-6128 Japan | |
| 渡よ差関再条権、 | 譲受人」と称する)、譲受人の継承人、後継者、被譲および法定代理人に対して、下記の名称の発明お出願、非仮出願、分割出願、継続出願、国際出願、出願、および再発行出願を含む全ての特許出願に、また前記発明に関する全ての特許証、期間延長、、再審査証に関して、(米国は米国法第35章第100歳されるごとく)米国に対して全ての権利、所有よび利益を譲渡することに同意し、またここに譲移転し、また移譲し、 | (hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, international, substitute and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as |
| (11) | Insert Identification such as Title, Case Number, or Foreign Application Number 名称、事件番号、もしくは外国出願番号のような確認事項を記入のこと | |
| (11) | GLASS CERAMIC SINTERED BODY AN | ND WIRING SUBSTRATE |

PATENT REEL: 054279 FRAME: 0570

(12) Alternative Identification for filed applications 提出された出願のための代案確認事項

(12) U.S. Application Serial Number

右記の米国出願整理番号で

16/923,531

filed

July 8, 2020

上記日付において提出されたものである。

- 1) 各々の署名人は、前記発明に関する全ての 出願および/もしくは特許に関して必要な全て の書類に署名し日付を記入することに同意し、 譲受人が必要と思われる、このような出願およ び特許に関しての別途譲渡証に署名し日付を記 入することに同意する。
- 2) 各々の署名人は、前記発明に関する全ての出願もしくは特許に関して表明されるインターフェレンスもしくは特許発行後の検討の手続きに関して必要な全ての書類に署名し日付を記入することに同意し、証拠取得およびそのようなインターフェレンスもしくは特許発行後の検討の手続きを進行するにあたり、いかなる方法においても前記譲受人と協力することに同意する。
- 3) 各々の署名人は、国際工業所有権保護協定 の請求もしくは規定もしくは類似協定に関して 必要な全ての用紙および書類に署名し日付を記 入し、必要ないかなる行為も施行することに同 意する。
- 4) 各々の署名人は、前記譲受人に対して有効な米国特許の承認を取得し、維持し、もしくは再発行もしくは再審査により確認するために必要ないかなる行為も施行することに同意する。
- 5) 各々の署名人は、米国特許商標庁長官に前記出願から発生した全ての特許を、全ての利益の譲受人としての前記譲受人に対して発行することを許可および請求し、署名人はここに譲渡する全ての利益を譲るための全ての権利を有し、対立関係にある協定に過去に署名し日付を記入することなくもしくは将来署名し日付を記入しないことを誓約し、この協定が前記譲渡人、譲渡人の継承人、譲渡人の後継者、譲渡人の被譲者、および譲渡人の法定代理人に法的義務を負わせるものであることに同意する。
- 6) 各々の署名人は、この書類の記録上、米国特許商標庁の規定に従うために、必要もしくは所望であればこの譲渡証にさらに確認事項を記入するための権利を OLIFF PLC に付与する。

(13) 宣言書

私は、上記に氏名を記載した発明者として、 以下のとおり宣言する:

この宣言書に関わる上記出願で請求した発明 の(もしくは請求した意匠の)、本来の発明者で ある、もしくは本来の共同の発明者であると信 じる。

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention, and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC 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.

(13) **Declaration**

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

上記出願は、自己によりなされたか、もしく は自己によりなされるように許可を受けたもの であった。

私は、請求項を含む上記出願の内容を検討お よび理解し、連邦施行規則第37章第1条第56 項に定義されるごとく、特許性に関して重要で あると認識している全ての情報を米国特許商標 庁に開示すべき義務を有することを認める。

私は、この宣言書において故意に虚偽の陳 述等を行った場合、米国法第18章第1001条に より、罰金もしくは最高5年の禁錮に処せられ るか、またはこれらの刑が併科されることを 理解する。

The application was made or authorized to be made by me.

I have reviewed and understand the contents of the above-identified application, including the claims, and am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR §1.56.

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.

署名人覧の隣の日付をもってこの署名が履行される。

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

| Date 日付 | 2020. 7. 16 | Inventor Signature 発明者署名 | Shin Takahe Shin TAKANE |
|-------------------|---|-----------------------------|---|
| Date 日付 | 2020, 7.16 | Inventor Signature 発明者署名 | Yousuke Futamata Yousuke FUTAMATA |
| Date 日付 | 2020, 7.16 | Inventor Signature 発明者署名 | Yasuharu Miyayehi Yasuharu MIYAUCHI |
| Date 日付 | | Inventor Signature 発明者署名 | |
| 目前で で署名 能な際 | 譲渡証は(a)米国内で署名される 、(b)米国外で署名される際には されることが望ましい。(a)もり には、下記に署名する少なくと 署名されることが望ましい: | は米国領事の目前 しくは(b)が不可 | This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here: |
| Date 日付 | - | Witness 証人 | |
| Date 日付 | | Witness 証人 | |

証人



United States Patent And Trademark Office

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

SEPTEMBER 22, 2020

PTAS

JESSE O. COLLIER OLIFF PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850 506262035

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 09/21/2020 REEL/FRAME: 053831/0607

NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: 192843

ASSIGNOR:

TAKANE, SHIN DOC DATE: 07/16/2020

ASSIGNOR:

FUTAMATA, YOUSUKE DOC DATE: 07/16/2020

ASSIGNOR:

MIYAUCHI, YASUHARU DOC DATE: 07/16/2020

ASSIGNEE:

TDK CORPORATION

2-5-1, NIHONBASHI, CHUO-KU

TOKYO, JAPAN 103-6128

APPLICATION NUMBER: 16923531 FILING DATE: 07/08/2020

PATENT NUMBER: ISSUE DATE:

TITLE: "GEASS" CERAMFCS SINFERED BODY MAD WIRING SUBSTRATE.

GLASS CERAMIC SINTERED BODY AND WIRING SUBSTRATE

PATENT P.O. Box 1450, Alexandria, Virginia 22313-1450 - WWW.USPTO.GOV

ASSIGNMENT RECORDATION BRANCH PUBLIC RECORDS DIVISION

PATENT REEL: 054279 FRAME: 0574

506262035 09/21/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6308781 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| Shin TAKANE | 07/16/2020 |
| Yousuke FUTAMATA | 07/16/2020 |
| Yasuharu MIYAUCHI | 07/16/2020 |

RECEIVING PARTY DATA

| Name: TDK CORPORATION | |
|--|----------|
| Street Address: 2-5-1, Nihonbashi, Chuo-ku | |
| City: | Tokyo |
| State/Country: | Japan |
| Postal Code: | 103-6128 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16923531 |

CORRESPONDENCE DATA

(703)836-2787 Fax Number:

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: 703-836-6400 Email: email@oliff.com JESSE O. COLLIER **Correspondent Name:**

Address Line 1: **OLIFF PLC**

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 192843 NAME OF SUBMITTER: **CAMILLE MALHOTRA** SIGNATURE: /Camille Malhotra/ **DATE SIGNED:** 09/21/2020

Total Attachments: 3

source=7851365_1#page1.tif source=7851365_1#page2.tif source=7851365 1#page3.tif

> **PATENT REEL: 054279 FRAME: 0575 RECORDED: 11/02/2020**