ESTTA Tracking number:	**ESTTA1301908**
Filing date:	**08/04/2023**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Petition for Cancellation

Notice is hereby given that the following party has filed a petition to cancel the registration indicated below.

Petitioner information

Name	Samsung Electronics Co., Ltd.		
Entity	Limited Company	Citizenship	Republic of Korea
Address	129, SAMSUNG-RO YEONGTONG-GU YONGIN-SI, GYEONGGI-DO, 17113 KOREA, REPUBLIC OF		

Attorney information	DAVID A. PLUMLEY LEWIS ROCA ROTHGERBER CHRISTIE LLP 655 NORTH CENTRAL AVENUE SUITE 2300 GLENDALE, CA 91203 UNITED STATES Primary email: pto@lewisroca.com Secondary email(s): dplumley@lewisroca.com, kykim@lewisroca.com, jbollinger@lewisroca.com 626-795-9900
Docket no.	306492-00028

Registration subject to cancellation

Registration no.	6115619	Registration date	08/04/2020
Register	Principal		
International registration no.	NONE	International registration date	NONE
Registrants	Rosnes Corporation 5-1, YAMANOUCHIYORO-CHO, UKYO-KU, KYOTO-SHI KYOTO 615-0081 JAPAN OPNOUS K.K co., Ltd. 1-5-4, KOJIMACHI, CHIYODA-KU TOKYO 1020083 JAPAN		

Goods/services subject to cancellation

Class 009. First Use: None First Use In Commerce: None All goods and services in the class are subject to cancellation, namely: Semi-conductors; semiconductor devices; integrated circuits; image sensors

Grounds for cancellation

Abandonment	Trademark Act Section 14(3)
Other	Non-Use - Trademark Act Section 14(6)

Attachments	Petition.pdf(560286 bytes) Declaration and Exhibits_Part1.pdf(6136517 bytes) Declaration and Exhibits_Part2.pdf(6212754 bytes) Declaration and Exhibits_Part3.pdf(865745 bytes)

Signature	/Karen Y. Kim/
Name	Karen Y. Kim
Date	08/04/2023

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

In the Matter of Trademark Registration No. 6115619
For the mark DIAMOND PIXEL (word mark)

SAMSUNG ELECTRONICS CO., LTD., Petitioner, v. ROSNES CORPORATION; and OPNOUS K.K CO., LTD. Registrants.	Cancellation No. ________ **PETITION FOR CANCELLATION**

Samsung Electronics Co., Ltd. ("Samsung" or "Petitioner") is a Republic of Korea limited company with an address of 129, Samsung-ro, Yeongtong-gu, Yongin-si, Gyeonggi-do, Republic of Korea 17113, and who believes that it is being damaged and will continue to be damaged by the registration of the word mark DIAMOND PIXEL as show in U.S. Trademark Registration No. 6,115,619 (the "Registration") in International Class 9 for "Semi-conductors; semiconductor devices; integrated circuits; image sensors" and hereby seeks to cancel the registration.

As grounds for cancellation, Petitioner alleges that:

1. Registrants Rosnes Corporation ("Rosnes") and Opnous K.K Co., Ltd. ("Opnous") (collectively, "Registrants") are the owners of United States Trademark Registration No. 6,115,619 (the "Registration") for the mark DIAMOND PIXEL ("Registrants' Mark") for "Semi-conductors; semiconductor devices; integrated circuits; image sensors" in International Class 9. The application that later issued as the Registration was filed on January 28, 2020, pursuant to Section 66(a) of the Trademark Act (15 U.S.C. §1141f(a)) based on International Registration

No. 1522407. As it was based on a Section 66(a) application, the Registration issued on August 4, 2020, without the Registrants submitting any evidence of use of the trademark in U.S. Commerce.

2. On information and belief, Rosnes is a Japanese corporation.

3. On information and belief, Opnous is a Japanese limited company.

4. Petitioner is the owner of United States Trademark Application No. 90/127,492 ("Petitioner's Application") for the mark SAMSUNG DIAMOND PIXEL for "Digital signage display panels; Light emitting diode (LED) displays; OLED (Organic light emitting diode) display panels; Flat panel display screens; LCD large-screen displays; Flexible flat panel displays for computers; Video display screens for portable communications apparatus" in International Class 9. Petitioner's Application was filed on August 20, 2020, on an intent to use basis. A copy of the TESS printout for Petitioner's Application is attached as Exhibit A.

5. Petitioner's Application was refused registration based on an alleged likelihood of confusion with the Registrants' Mark.

6. On appeal, the Board affirmed such refusal based on Registrants' Mark. Petitioner has sought and obtained an extension of time to appeal or review the decision of the Board.

7. Given the Board's decision in Petitioner's Application, Petitioner is being injured by the continued existence of the Registration and has standing to petition for its cancellation.

8. On information and belief, Registrants have never used the Registrants' Mark in U.S. Commerce in connection with "Semi-conductors; semiconductor devices; integrated circuits; image sensors."

9. On information and belief, Rosnes operates its company website using the domain rosnes.jp (the "Rosnes Domain") which resolves to the homepage for the English language website for Rosnes at http://rosnes.jp/en/rosnes-inc/ (the "Rosnes Website"). Declaration of Julie Bolliger ("Bolliger Declaration") ¶ 14.

10. On information and belief, Opnous operates its company website using the domain opnous.co.jp (the "Opnous Domain") which resolves to the homepage for the English language website for Opnous at https://opnous.co.jp/ (the "Opnous Website"). Bolliger Declaration ¶ 15.

11. Using the Google search engine, Petitioner conducted an Internet search for webpages that include the terms "DIAMOND PIXEL" and "Rosnes." The search did not identify any evidence of use of the Registrants' Mark by Rosnes in the United States. Bolliger Declaration ¶¶ 4-9.

12. Using the Google search engine, Petitioner conducted an Internet search for webpages that include the terms "DIAMOND PIXEL" and "Opnous." The search did not identify any evidence of use of Registrants' Mark by Opnous in the United States. Bolliger Declaration ¶¶ 10-13.

13. Using the "Advanced Search" feature of the Google search engine, Petitioner conducted an Internet search for any occurrences of either of the terms "DIAMOND" or "DIAMOND PIXEL" at the Rosnes Domain. The search did not identify any evidence of use of the Registrants' Mark by Rosnes in the United States. Bolliger Declaration ¶¶ 16, 18-19.

14. Using the "Advanced Search" feature of the Google search engine, Petitioner conducted an Internet search for any occurrences of either of the terms "DIAMOND" or "DIAMOND PIXEL" at the Opnous Domain. The search did not identify any evidence of use of Registrants' Mark by Opnous in the United States. Bolliger Declaration ¶¶ 17, 20.

15. Using the Wayback Machine at www.archive.org, Petitioner searched for archived "snapshots" of webpages having a Uniform Resource Locator ("URL") with a prefix matching that of the Rosnes Website: http://rosnes.jp/en. Upon reviewing snapshots taken between August 4, 2020 and August 4, 2023, Petitioner found no evidence that Rosnes had used Registrants' Mark. Bolliger Declaration ¶¶ 20-21.

16. Using the Wayback Machine, Petitioner searched for archived “snapshots” of webpages having a Uniform Resource Locator (“URL”) with a prefix matching that of the Opnous Website: http://opnous.co.jp. Upon reviewing snapshots taken between August 4, 2020 and August 4, 2023, Petitioner found no evidence that Opnous had used Registrants’ Mark. Bolliger Declaration ¶¶ 23-24.

CAUSES OF ACTION FOR CANCELLATION

COUNT I: PRESUMPTION OF ABANDONMENT BASED ON THREE YEARS OF NON-USE

17. Petitioner repeats and realleges the allegations of paragraphs 1-16 of the petition.

18. On information and belief, it has been at least three (3) consecutive years since the Registration issued as a registration, and during that time, Registrants have never used Registrants’ Mark in U.S. Commerce for the goods identified in the Registration. Thus, the statutory presumption of abandonment applies pursuant to Section 45 of the Trademark Act (15 U.S.C. § 1127).

19. On information and belief, Registrants cannot rebut the statutory presumption of abandonment with any evidence of actual use of Registrants’ Mark in U.S. Commerce nor with any evidence of intent to resume use of Registrants’ Mark in U.S. Commerce.

20. By virtue of the foregoing, if Registrants’ Mark is permitted to remain on the Principal Register, Petitioner will continue to be damaged, including its ability to secure a registration for its SAMSUNG DIAMOND PIXEL mark, and Registrants will enjoy unlawful gain and advantage to which it is not entitled under the Lanham Act.

21. The Registration should be cancelled pursuant to the Trademark Act §§14(3) and 45 (15 U.S.C. §§ 1064(6) and 1127), and TBMP § 309.03(c)(1) paragraph 13.

COUNT II: ABANDONMENT WITH NO INTENT TO RESUME USE

22. Petitioner repeats and realleges the allegations of paragraphs 1-21 of the petition.

23. On information and belief, Registrants have either never used, or have completely ceased using, the Registrants' Mark in U.S. Commerce in connection with any or all of the goods and services identified in the Registration in the United States.

24. On information and belief, any use that Registrants made of Registrants' Mark in the United States was not a use made in the ordinary course of trade and was merely to reserve a right in Registrants' Mark.

25. On information and belief, Registrants do not have an intent to resume use of the Registrants' Mark in U.S. Commerce in connection with any or all of the goods identified in the Registration in the reasonably foreseeable future.

26. On information and belief, Registrants have not taken any steps towards a bona fide use of the Registrants' Mark in U.S. Commerce in connection with any or all of the goods identified in the Registration in the United States.

27. By virtue of the foregoing, if Registrants' Mark is permitted to remain on the Principal Register, Petitioner will continue to be damaged, including its ability to secure a registration for its SAMSUNG DIAMOND PIXEL mark, and Registrants will enjoy unlawful gain and advantage to which it is not entitled under the Lanham Act.

28. The Registration should be cancelled pursuant to the Trademark Act §§14(3) and 45 (15 U.S.C. §§ 1064(6) and 1127), and TBMP § 309.03(c)(1) paragraph 13.

COUNT III: EXPUNGEMENT FOR NON-USE

29. Petitioner repeats and realleges the allegations of paragraphs 1-28 of the petition.

30. The Registration issued on August 4, 2020 pursuant to Section 66(a) of the United States Trademark Act and is now at least three years old.

31. On information and belief, Registrants have not used Registrants' Mark in U.S. Commerce in connection with any of the goods identified in the Registration at any time since the Registration issued.

32. On information and belief, no special circumstances exist that excuse such non-use.

33. The Registration should be cancelled in whole on the grounds of expungement pursuant to the Trademark Act §14(6) (15 U.S.C. §1064(6)), and TBMP § 307.03, TBMP § 309.03(c)(1) paragraph 28, as Registrants have never used the Registrants' Mark in U.S. Commerce in connection with any of the goods recited in the Registration at any time since the Registration issued.

WHEREFORE, Petitioner prays that this Petition for Cancellation be sustained in favor of Petitioner and that U.S. Registration No. 6,115,619 be cancelled in its entirety.

Respectfully submitted,

LEWIS ROCA ROTHGERBER CHRISTIE LLP

Date: August 4, 2023

By /Karen Y. Kim/

David A. Plumley
Karen Y. Kim
Attorneys for Petitioner
P.O. Box 29001
Glendale, CA 91209-9001
(626) 795-9900

Exhibit A

TESS was last updated on Fri Aug 4 03:47:22 EDT 2023

Diamond Pixel

Word Mark	DIAMOND PIXEL
Goods and Services	IC 009. US 021 023 026 036 038. G & S: Semi-conductors; semiconductor devices; integrated circuits; image sensors
Standard Characters Claimed	
Mark Drawing Code	(4) STANDARD CHARACTER MARK
Serial Number	79281958
Filing Date	January 28, 2020
Current Basis	66A
Original Filing Basis	66A
Published for Opposition	May 19, 2020
Registration Number	6115619
International Registration Number	1522407
Registration Date	August 4, 2020
Owner	(REGISTRANT) Rosnes Corporation CORPORATION JAPAN 5-1, Yamanouchiyoro-cho, Ukyo-ku, Kyoto-shi Kyoto 615-0081 JAPAN (REGISTRANT) OPNOUS K.K co., Ltd. Company Limited JAPAN 1-5-4, Kojimachi, Chiyoda-ku Tokyo 1020083 JAPAN
Priority Date	October 11, 2019
Type of Mark	TRADEMARK
Register	PRINCIPAL
Live/Dead Indicator	LIVE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

In the Matter of Trademark Registration No. 6115619
For the mark DIAMOND PIXEL (word mark)

SAMSUNG ELECTRONICS CO., LTD., Petitioner, v. ROSNES CORPORATION; and OPNOUS K.K CO., LTD. Registrants.	Cancellation No. ________ **DECLARATION OF JULIE BOLLIGER**

I, Julie Bolliger, am competent to testify to the matters set forth herein and declare and state as follows:

1. I am submitting this Declaration in support of Samsung Electronics Co., Ltd.'s Petition for Cancellation regarding the trademark DIAMOND PIXEL, Reg. No. 6115619, (the "Registration") jointly owned by Rosnes Corporation ("Rosnes") and OPNOUS K.K co., Ltd. ("Opnous.")

2. I am a paralegal at Lewis Roca Rothgerber Christie LLP. My main focus of work is intellectual property and am familiar with the fundamentals of U.S. trademark law.

3. Except as otherwise indicated, the facts set forth herein are known personally to me or are being provided on information and belief.

4. Using the Google search engine, I conducted an Internet search for webpages that include both of the terms "diamond pixel" and "rosnes." A printout of the search results for this search is attached as **Exhibit 1** and it is my conclusion that this search did not reveal any

trademark use of the DIAMOND PIXEL trademark by Rosnes. I explain each result from that search in the following paragraphs.

5. Website: https://trademarks.justia.com/owners/rosnes-corporation-2120629/. This webpage lists U.S. trademark applications or registrations owned or co-owned by Rosnes and identifies the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Rosnes in connection with the goods of the Registration. See **Exhibit 2**.

6. Website: https://uspto.report/TM/88869753. This webpage shows the trademark application details for DIAMOND PIXEL, Ser. No. 88869753 (filed by Samsung Display Co., Ltd.) and also lists information about the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Rosnes in connection with the goods of the Registration. See **Exhibit 3**.

7. Website: https://doras.dcu.ie/22520/1/PFONeill_Aug2018.pdf. This webpage links to a PhD submission paper by Paul Francis O'Neill at Dublin City University, School of Mechanical and Manufacturing Engineering, entitled "Internal void fabrication via mask projection micro-stereolithography: A rapid repeatable microfluidic prototyping technique." Because this paper is 235 pages long, Exhibit 4 includes only the introductory portions through the abstract and those pages that include either "diamond pixel" or "Rosnes." The paper includes the term "diamond pixel" in what appears to be a descriptive way, and also includes three footnotes to other articles that appear to be authored by a person with the surname "Rosnes." However, this paper fails to show any use of DIAMOND PIXEL as a trademark by Rosnes in connection with the goods of the Registration. See Exhibit **4**.

8. Website: https://www.houjin.info/details/1130001028431. This website appears to be in Japanese, providing company information about Rosnes including information about the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Rosnes in connection with the goods of the Registration. See **Exhibit 5**.

9. Website: https://okashik.atype.jp/redirect.php?action=url&goto=lautestfast.tk/iavzdoh372okashikatypejpmini3 This page does not load. See **Exhibit 6**.

10. Using the Google search engine, I conducted an Internet search of the terms “diamond pixel” and “opnous.” A printout of the search results for this search is attached as **Exhibit 7** and it is my conclusion that this search did not reveal any trademark use of the DIAMOND PIXEL trademark by Opnous. I explain each result from that search in the following paragraphs.

11. Website: https://uspto.report/TM/88869753. This webpage shows the trademark application details for DIAMOND PIXEL, Ser. No. 88869753 (filed by Samsung Display Co., Ltd.) and also lists information about the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Opnous in connection with the goods of the Registration. See **Exhibit 8**.

12. Website: https://trademarks.justia.com/owners/rosnes-corporation-2120629/. This webpage lists U.S. trademark applications or registrations owned or co-owned by Opnous and identifies the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Opnous in connection with the goods of the Registration. See **Exhibit 9**.

13. Website: https://www.houjin.info/detail/2010001178766/. This website appears to be in Japanese, providing company information about Opnous including information about the Registration but fails to show any use of DIAMOND PIXEL as a trademark by Opnous in connection with the goods of the Registration. See **Exhibit 10**.

14. Using the Google search engine, I searched for the term “Rosnes Corporation” and from that search, I believe that the domain name for the website operated by Rosnes is rosnes.jp (the “Rosnes Domain.”) That domain resolves to the homepage for what I believe is the English language website for Rosnes at http://rosnes.jp/en/rosnes-inc/ (the “Rosnes Website.”) A printout of the homepage for the Rosnes Website is attached as **Exhibit 11**.

15. Using the Google search engine, I searched for the term “Opnous Co” and from that search, I believe that the domain name for the website operated by Opnous is opnous.co.jp (the

"Opnous Domain.") That domain resolves to the homepage for what I believe is the English language website for Opnous at https://opnous.co.jp/ (the "Opnous Website.") A printout of the homepage for the Opnous Website is attached as **Exhibit 12**.

16. Using the Google "Advanced Search" search engine, I searched for any occurrences of the term "diamond pixel" at the Rosnes Domain with no results. A printout of the result page for that search is attached as **Exhibit 13**.

17. Using the Google "Advanced Search" search engine, I searched for any occurrences of the term "diamond pixel" at the Opnous Domain with no results. A printout of the result page for that search is attached as **Exhibit 14**.

18. Using the Google "Advanced Search" search engine, I searched for any occurrences of the term "diamond" at the Rosnes Domain with one result. A printout of the result page for that search is attached as **Exhibit 15**.

19. The one result from the Google "Advanced Search" for occurrences of "diamond" at the Rosnes Domain is: http://www.rosnes.jp/kigyou_en.html. This appears to be a webpage that mentions the company "Mitsuboshi [sic] Diamond industrial" but includes no use of DIAMOND or DIAMOND PIXEL as a trademark by Rosnes in connection with the goods of the Registration. See **Exhibit 16**.

20. Using the Google "Advanced Search" search engine, I searched for any occurrences of the term "diamond" at the Opnous Domain with no results. A printout of the result page for that search is attached as **Exhibit 17**.

21. Using the Wayback Machine at www.archive.org, I searched for archived "snapshots" of Uniform Resource Locators ("URLs") with the prefix http://rosnes.jp/en (the "Rosnes URL Prefix Search.") According to the results of the Rosnes URL Prefix Search, 22 different URLs with that prefix had been captured, some with multiple captures. See **Exhibit 18.**

22. I then reviewed each capture from the Rosnes URL Prefix Search with a capture date between August 4, 2020 and the date of this Declaration, and found no occurrences of either of the terms “DIAMOND” or “DIAMOND PIXEL” at any of those captures.

23. Using the Wayback Machine, I searched for archived “snapshots” of URLs with the prefix https://opnous.co.jp (the “Opnous URL Prefix Search.”) According to the results of the Opnous URL Prefix Search, 5 different URLs with that prefix had been captured, some with multiple captures. See **Exhibit 19.**

24. I then reviewed each capture from the Opnous URL Prefix Search with a capture date between August 4, 2020 and the date of this Declaration, and found no occurrences of either of the terms “DIAMOND” or “DIAMOND PIXEL” at any of those captures.

I declare under penalty of perjury of the laws of the United States of America that the foregoing is true and correct.

EXECUTED this 4th day of August, 2023 at Phoenix, Arizona, United States of America.

By: /Julie Bolliger/
Julie Bolliger, Paralegal
LEWIS ROCA ROTHGERBER CHRISTIE LLP

EXHIBIT 1

"diamond pixel" rosnes

Images | Videos | Shopping | News | Maps | Books | Flights | Finance

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About 5 results (0.32 seconds)

USPTO .report
https://uspto.report › ...

DIAMOND PIXEL - Samsung Display Co., Ltd.

Mark For: **DIAMOND PIXEL**® trademark registration is intended to cover the categories of computer monitors; video monitors; computers; Television receivers; ...

Justia
https://trademarks.justia.com › owners › rosnes-corpor...

Rosnes Corporation Trademarks

DIAMOND PIXEL. Filed: January 28, 2020. Semi-conductors; semiconductor devices; integrated circuits; image sensors. Owned by: **Rosnes** Corporation and OPNOUS ...

https://trademarks.justia.com › owners › opnous-k-k-c...

OPNOUS K.K co., Ltd. Trademarks

DIAMOND PIXEL. Filed: January 28, 2020. Semi-conductors; semiconductor devices; integrated circuits; image sensors. Owned by: **Rosnes** Corporation and OPNOUS ...

Dublin City University
https://doras.dcu.ie › PFONeill_Aug2018 PDF

Internal void fabrication via mask projection micro ... - DORAS

by PF O'Neill · 2018 · Cited by 4 — The Asiga 3D printer DMD optical engine is oriented in a **diamond pixel** orientation as previously reported by Gong et al.12 and verified in section 6.2.1...
235 pages

法人.info
https://www.houjin.info › detail · Translate this page

株式会社Rosnes | 京都府京都市下京区

Jul 28, 2021 — 株式会社**Rosnes**（ロスネス）は、法人番号:1130001028431で京都府京都市下京区鶏鉾町480番地 ... 株式会社**Rosnes**について（項目別） ... **Diamond Pixel**.

● **Southern United States** - Based on your past activity - Update location

More options in **Quick settings** (⚙)

EXHIBIT 2

Rosnes Corporation Trademarks

Rosnes

ROSNES

Filed: February 3, 2011

Telecommunication devices and apparatus for capturing and/or processing images; parts for telecommunication devices and...

Owned by: Rosnes Corporation

Serial Number: 79094570

Diamond Pixel

DIAMOND PIXEL

Filed: January 28, 2020

Semi-conductors; semiconductor devices; integrated circuits; image sensors

Owned by: Rosnes Corporation and OPNOUS K.K co., Ltd.

Serial Number: 79281958

EARTH CAMERA

EARTH CAMERA

cameras; camera parts and accessories; television cameras; digital cameras; digital camcorders; network cameras; panoramic...

Owned by: Rosnes Corporation and KANEMATSU (CHINA) Co., Ltd.

Serial Number: 86056930

Justia Legal Resources

EARTH CAMERA

digital camcorders; network cameras; panoramic...
Owned by: Rosnes Corporation and KANEMATSU (CHINA) Co., Ltd.
Serial Number: 86056930

EXHIBIT 3

DIAMOND PIXEL

Samsung Display Co., Ltd.

Application Filed: 2020-04-13

Trademark Application Details

DIAMOND PIXEL

Mark For: DIAMOND PIXEL® trademark registration is intended to cover the categories of computer monitors; video monitors; computers; Television receivers; cathode ray tubes; Plasma display panels; flat panel electroluminescent displays; diodes; Portable communication machines; Displays for portable communication equipment; MP3 players; Displays for MP3 players; MP4 Players; Displays for MP4 Players; Portable multimedia players; Displays for portable multimedia players; Vehicle navigation devices; Displays for

Show All

Status

2020-04-16 UTC

Refresh

LIVE APPLICATION Awaiting Examination

The trademark application has been accepted by the Office (has met the minimum filing requirements) and has not yet been assigned to an examiner.

The trademark application has been accepted by the Office (has met the minimum filing requirements) and has not yet been assigned to an examiner.

Research	OneLook Acronym Finder
Serial Number	88869753
Registration Number	6422005
Mark Literal Elements	DIAMOND PIXEL
Mark Drawing Type	4 - STANDARD CHARACTER MARK
Mark Type	Trademark
Current Location	NEW APPLICATION PROCESSING 2020-04-16
Basis	44(e)
Class Status	ACTIVE
Primary US Classes	021: Electrical Apparatus, Machines and Supplies 023: Cutlery, Machinery, Tools and Parts Thereof 026: Measuring and Scientific Appliances 036: Musical Instruments and Supplies 038: Prints and Publications
Primary International Class	009 - Primary Class (Electrical and scientific apparatus) Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), lifesaving and teaching apparatus and instruments; apparatus for recording, transmission or reproduction of sound or images; magnetic data carriers, recording discs; automatic vending machines and mechanisms for coin operated apparatus; cash registers, calculating machines, data processing equipment and computers; fire-extinguishing apparatus.
Filed Use	No
Current Use	No
Intent To Use	No
Filed ITU	No
44D Filed	No
44E Current	Yes
66A Current	No
Current Basis	No
No Basis	No
Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

The trademark application has been accepted by the Office (has met the minimum filing requirements) and has not yet been assigned to an examiner.

Research	OneLook Acronym Finder
Serial Number	88869753
Registration Number	6422005
Mark Literal Elements	DIAMOND PIXEL
Mark Drawing Type	4 - STANDARD CHARACTER MARK
Mark Type	Trademark
Current Location	NEW APPLICATION PROCESSING 2020-04-16
Basis	44(e)
Class Status	ACTIVE
Primary US Classes	021: Electrical Apparatus, Machines and Supplies 023: Cutlery, Machinery, Tools and Parts Thereof 026: Measuring and Scientific Appliances 036: Musical Instruments and Supplies 038: Prints and Publications
Primary International Class	009 - Primary Class (Electrical and scientific apparatus) Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), lifesaving and teaching apparatus and instruments; apparatus for recording, transmission or reproduction of sound or images; magnetic data carriers, recording discs; automatic vending machines and mechanisms for coin operated apparatus; cash registers, calculating machines, data processing equipment and computers; fire-extinguishing apparatus.
Filed Use	No
Current Use	No
Intent To Use	No
Filed ITU	No
44D Filed	No
44E Current	Yes
66A Current	No
Current Basis	No
No Basis	No
Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

2014-07-04	Trademark Registered
2020-04-13	Application Filed
2020-04-16	Location: NEW APPLICATION PROCESSING
2020-04-16	Status: Live/Pending
2020-04-16	Status: New application will be assigned to an examining attorney approximately 3 months after filing date.
2020-04-16	Transaction Date
2021-07-13	Trademark Registered

Trademark Parties (Applicants & Owners)

Party:	Samsung Display Co., Ltd.
Address	1, Samsung-ro, Giheung-gu Yongin-si, Gyeonggi-do KOREA, REPUBLIC OF 17113
Legal Entity Type	Limited Company (ltd.)
Legal Entity State	KOREA, REPUBLIC OF

Documents

Application	MULTI	2020-04-13

D10000	"PIXEL"

Trademark Filing History

Description	Date	Proceeding Number
NEW APPLICATION ENTERED IN TRAM	2020-04-16	

Similar Marks

Mark Image	Registration | Serial	Company	Trademark Application Date
DIAMOND PIXEL	90865110 not registered Live/Pending	Samsung Display Co., Ltd.	2021-08-04
DIAMOND PIXEL	88869753 not registered Live/Pending	Samsung Display Co., Ltd.	2020-04-13
Diamond Pixel	79363580 not registered Live/Pending	Samsung Display Co., Ltd.	2022-12-05
Diamond Pixel	79281958 not registered Live/Pending	Rosnes Corporation	2020-01-28
Diamond Pixel DIAMOND PIXEL	79281958 not registered Live/Pending	OPNOUS K.K co., Ltd.	2020-01-28

EXHIBIT 4

Google

https://doras.dcu.ie/22520/1/PFONeill_Aug2018

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All filters | Tools | SafeSearch

About 2 results (0.27 seconds)

Dublin City University
https://doras.dcu.ie › PFONeill_Aug2018 PDF

Internal void fabrication via mask projection micro ... - DORAS

by PF O'Neill · 2018 · Cited by 4 — In terms of microfluidic device prototyping, VP methods present an inherent advantage over other lithographic methods (**i.e.** photolithography and soft ...
235 pages

uao.edu.co
https://red.uao.edu.co › bitstream › handle PDF

design of a multivariable control system for an additive

by FJM RIVERA — system is its capability to adapt to three different techniques, **i.e.**, laser metal ... Available: **https://doras.dcu.ie/22520/1/PFONeill_Aug2018.pdf**.

● **Southern United States** - Based on your past activity - Update location

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Internal void fabrication via mask projection micro-stereolithography: A rapid repeatable microfluidic prototyping technique

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submitted as part of the degree of Philosophiæ Doctor (PhD)

from

Dublin City University,

School of Mechanical and Manufacturing Engineering

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August 2018

Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of PhD, is entirely my own work, and that I have exercised reasonable care to ensure that the work is original, and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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List of Publications

Journal Papers

O'Neill P. F., Ben Azouz, A., Vázquez, M., Liu, J., Marczak, S., Slouka, Z., Chang, H. C., Diamond, D., Brabazon, D., Advances in three-dimensional rapid prototyping of microfluidic devices for biological applications, Biomicrofluidics 8, 052112 (2014).[1]

O'Neill, P., Jolivet, L., Kent, N. J. & Brabazon, D. Physical integrity of 3D printed parts for use as embossing tools. Adv. Mater. Process. Technol. 698, 1–10 (2017).[2]

Kent, N. J., Jolivet, L., O'Neill, P. & Brabazon, D. An evaluation of components manufactured from a range of materials, fabricated using PolyJet technology. Adv. Mater. Process. Technol. 698, 1–12 (2017).[3]

International Peer Reviewed Conference Papers

O'Neill, P. F., Kent, N., Brabazon, D., Mitigation and control of the overcuring effect in mask projection micro-stereolithography, Proceedings of the 20th International ESAFORM Conference on Material Forming, ESAFORM 2017[4]

O'Neill, P., Barrett, A., Sullivan, T., Regan, F., Brabazon, D., Rapid prototyped biomimetic antifouling surfaces for marine applications, Advances in Functional Materials (AFM 2015)[5]

McCann, R., Freeland, B., O'Neill, P., "Nanoparticle Fabrication via Pulsed Laser Ablation in Liquid: A Step Towards Production Scale-up", Proceedings of the 20th International ESAFORM Conference on Material Forming, ESAFORM 2017

Oral Presentations

O'Neill P. F., Vázquez, M., Liu, J., Marczak, S., Chang, H. C., Diamond, D., Brabazon, D., Direct fabrication methods for high pressure micro-total analysis systems, Advances in Microfluidics & Nanofluidics (AMN), Academia Sinica, Taiwan, R.O.C, May 2014

O'Neill, P. F., Kent, N., Brabazon, D., Mitigation and control of the overcuring effect in mask projection micro-stereolithography, 20th International ESAFORM Conference on Material Forming, Dublin City University, April 2017

McCann, R., Freeland, B., O'Neill, P., "Nanoparticle Fabrication via Pulsed Laser Ablation in Liquid: A Step Towards Production Scale-up", 20th International ESAFORM Conference on Material Forming, ESAFORM 2017

Brabazon, D., O'Neill, P., McCann, R., Groarke, R., "Photonic assisted fabrication of advanced liquid UTLC and modular SPE chromatographic platforms", 31st International Symposium on Chromatography, 28 Aug – 1 Sept 2016, Cork, Ireland

Poster Presentations

O'Neill, P. F., Vázquez, M., Liu, J., Diamond, D., Brabazon, D., Direct fabrication methods for micro-total analysis systems, 9th International Conference on Surfaces, Coatings and Nanostructured Materials (NANOSMAT Dublin), Trinity College Dublin, September 2014

O'Neill, P. F., Kent, N., Brabazon, D., Mitigation and control of the overcuring effect in mask projection micro-stereolithography, Dublin City University Faculty Research Day, January 2017

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List of Abbreviations

2D	Two-Dimensional
3D	Three-Dimensional
ABS	Acrylonitrile Butadiene Styrene
AM	Additive Manufacturing
ANOVA	Analysis of Variance
ATP	Adenosine Triphosphate
CA	Contact Angle
CAD	Computer Aided Design
CAM	Computer Aided Manufacturing
CI	Confidence Interval
COC	Cyclo Olefin Co-polymer
COP	Cyclo Olefin Polymer
DENV	Dengue Virus
DEPC	Diethylpyrocarbonate
DI	De-ionised
DLP	Digital Light Processing
DMD	Digital Micromirror Device
DRIE	Deep Reactive Ion Etching
EDTA	Ethylenediaminetetraacetic Acid
FDM®	Fused Deposition Modelling
FFF	Fused Filament Fabrication
FWHM	Full Width at Half Maximum
HPLC	High Performance Liquid Chromatography
i3DP	Ink-jet 3D Printing
IC	Ion Chromatography
IEM	Ion Exchange Membrane
IPA	Isopropyl Alcohol
LC	Liquid Chromatography
LED	Light Emitting Diode
LoaC	Lab on a Chip
LOM	Laminate Object Manufacturing
MEMS	Micro Electro-Mechanical Systems
MJM	MultiJet Modelling
MJP	MultiJet Printing
MPSL	Mask Projection Stereolithography
MPμSL	Mask Projection micro-Stereolithography
Nd:YAG	Neodymium-doped Yttrium-Aluminium Garnett
PC	Polycarbonate
PCR	Polymerase Chain Reaction
PDMS	Polydimethylsiloxane
PE	Polyethylene
PEEK	Polyether ether ketone
PET	Polyethylene terephthalate
PJ	PolyJet
PLA	Polylactic Acid
PMMA	Polymethyl methacrylate
POC	Point of Care
PP	Polypropylene

PS	Polystyrene
PSA	Pressure Sensitive Adhesive
PTFE	Polytetrafluoroethylene
PVA	Poly(vinyl alcohol)
PVC	Poly(vinyl chloride)
qRT-PCR	Quantitative Reverse Transcription Polymerase Chain Reaction
RIE	Reactive Ion Etching
ROI	Region of Interest
SEM	Scanning Electron Microscope
SL	Sterelithography
μSL	Micro-Stereolithography
SLM	Selective Laser Melting
SLS	Selective Laser Sintering
SPE	Solid Phase Extraction
STL	Standard Tessellation Language
TAS	Total (chemical) Analysis System
μTAS	Miniaturised Total Analysis System
TE	Tris-EDTA (pH buffer)
T_g	Glass transition temperature
TPP	Two-Photon Polymerisation
UV	Ultraviolet
UV-Vis	Ultraviolet-Visible
VP	Vat Photopolymerisation

List of Symbols

Symbol	Unit(s)	Equation	Name
D	J.cm^{-2}	tI	Optical energy dose
D_c	J.cm^{-2}	$T_c I_0$	Critical optical energy dose
D_n	J.cm^{-2}	$t_l I_n$	Optical energy dose received at depth z during exposure of layer n
D_{sim}	J.cm^{-2}	-	Optical energy dose numerical solution
E_{rel}	%	-	Relative error limit
h_a	µm	$1/\alpha$	Characteristic resin penetration depth
i_{max}	-	-	Maximum number of iterations
I	W.cm^{-2}	$I_0 e^{-\alpha z}$	Optical irradiance
I_0	W.cm^{-2}	-	Optical irradiance at the interface
I_n	W.cm^{-2}	-	Optical irradiance received at depth z during exposure of layer n
n	-	-	Layer index
N	-	-	Total number of layers
p_x	µm	-	DMD pixel depth
p_y	µm	-	DMD pixel width
t	s	-	Time
t_l	s	-	Layer exposure time
t_p	s	-	Polymerisation time
T_c	s	D_c/I_0	Photopolymer critical time
z	µm	-	Depth
z_l	µm	-	Build layer thickness
z_p	µm	$h_a \ln\left(t_p/T_c\right)$	Polymerisation depth
Z_{shift}	-	-	Voxel z-shift
α	µm^{-1}	-	Material absorption coefficient
γ	-	t_l/T_c	Normalised layer exposure time
δ_{in}	-	-	Input voxel array
δ_{mod}	-	$\theta_{ideal} - \phi_{\downarrow}$	Modified voxel array
δ_n	-	-	Binary solid/liquid classifier
ζ	-	z/h_a	Normalised depth
ζ_l	-	z_l/h_a	Normalised layer thickness
ζ_p	-	z_p/h_a	Normalised polymerisation depth
θ_{ideal}	-	-	Ideal solution
θ_{real}	-	-	Numerical solution
λ	-	-	Number of enclosing layers
τ	-	t/T_c	Normalised time
τ_p	-	t_p/T_c	Normalised polymerisation time
ϕ	-	$\theta_{real} - \theta_{ideal}$	Difference between ideal and numerical solution
$\phi_{\downarrow}$	-	-	Shifted difference array
Ω	-	D/D_c	Normalised energy dose
Ω_n	-	D_n/D_c	Normalised energy dose received at depth z during exposure of layer n
Ω_{sim}	-	D_{sim}/D_c	Normalised energy dose numerical solution

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To my mother Rena,

for your strength and guidance in difficult times

and to my father Frank,

for teaching me the importance of perseverance.

Abstract

Miniaturisation of common laboratory techniques has gathered significant interest in the last few decades with both academic and industrial researchers seeking to reduce waste, sample volume, and limits of detection for a wide range of applications. These goals present a unique challenge that originally spurred the creation of the multidisciplinary field of microfluidics in the 1980s. In the same time-frame 3D printing has progressed from its inception by Charles Hull in 1983 and developed into a common industry technique used at the design and prototyping stage of product development. 3D printing is now also used in custom end-user products in automotive, aerospace, and biomedical industries. Despite this, achieving internal features and voids at the micro-scale via 3D printing remains a major challenge.

In this thesis, Mask Projection micro-Stereolithography (MPμSL) was used as a fabrication method for the production of microscale internal voids and features toward achieving an ultra-rapid prototyping method for microfluidic applications. MPμSL is an ideal replication method for microfluidic applications as the working material is a liquid photo-polymer resin and thus can be removed from internal structures with relative ease. In addition, unlike classical multi-step fabrication methods that are prone to delamination, MPμSL enables the production of micro-scale capillaries capable of withstanding higher pressures in a single step.

MPμSL build quality, channel reproducibility, channel size and channel shape were examined, and process limitations were characterised. The so-called 'overcuring' of the liquid polymer resin presents the main obstacle in the creation of microscale channels and features using this technique and hence was a primary focus of this thesis. Material characterisation techniques used to determine the nature of the photopolymer materials were applied and a mathematical model was developed and applied to predict areas where overcuring is likely to occur. This model forms the basis of the novel design algorithm developed in this thesis to mitigate for the overcuring effect. Finally, the new algorithm was applied to the production of internal features. The resulting increased control over microchannel dimensions and improvement in repeatability of the technique was quantified.

6.2 Materials and methods

6.2.1 3D printer

A DLP 3D printer (Pico+27, Asiga, CA, USA) based on the MPμSL VP technique was used to fabricate microfluidic devices with defined channel height and shape. The Asiga Pico+27 operates at a wavelength of 405 nm and has a reported resolution of 27 μm in the build plane in *x* and *y* directions and a variable vertical *z*-resolution of 10 – 150 μm. *X-Y* resolution is based on the size of a single micromirror in the DMD micromirror array thus representing the base width and depth of a single voxel, with the variable slice thickness in the *z*-direction representing the voxel height. The DMD is a Texas Instruments DLP 4500 module (Austin, TX, USA), with a 912×1140 micromirror array arranged in a diamond pixel orientation[12]. In order to ensure alignment with DMD pixels, all test parts are rotated 45° on the build plane as shown in Figure 6.1.

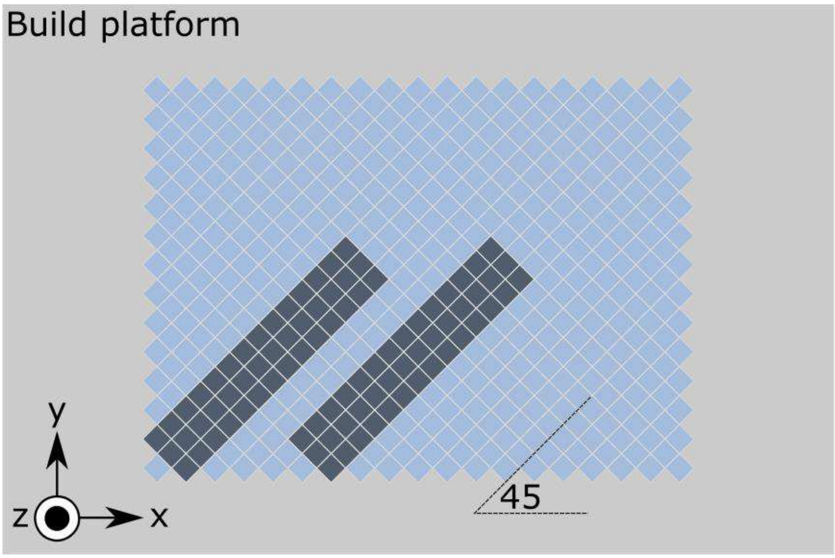

Figure 6.1. The orientation of the Asiga Pico+27 DMD pixels with respect to the X axis, adapted from Gong et al.[12].

DMD pixel alignment was experimentally verified by curing single ($1 \times 1\ \mathrm{mm}^2$) layers of photopolymer material at angles (0 - 90°) on to a glass slide and imaging using a VHX 2000 (Keyence, Osaka, Japan) and a Contour GT white light interferometer (Bruker, MA, USA), results are shown in Figure 6.2.

After design, the CAD models were exported in the 'stereolithography' (STL) file format and imported to Asiga Composer software (Asiga, Anaheim Hills, CA, USA) for placement on the build platform. Models were sliced at three slice thickness intervals (z_l) of 10, 25 and 50 μm respectively corresponding to the experimental design parameters in Table 6.4. Exposure time (t_l) for the three materials was set based on the results from section 6.2.5 (see Table 6.3). Raw and modified models were placed in the same build to minimise time-based curing variability between polymer batches as shown in Figure 6.13.

The Asiga 3D printer DMD optical engine is oriented in a diamond pixel orientation as previously reported by Gong et al.[12] and verified in section 6.2.1. Thus, all parts are oriented at 45° on the build platform with respect to the x-axis as shown in Figure 6.13.

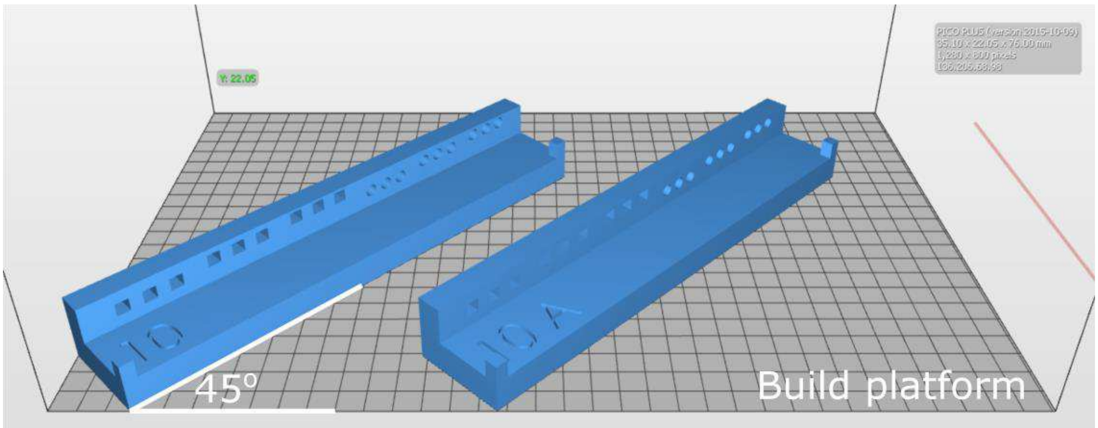

Figure 6.13. Image from Asiga Composer software showing the orientation of the CAD models on the build platform. Models are oriented at 45° w.r.t the x-axis to align with the 3D printer DMD pixel orientation.

6.2.8 Predictive model

After slicing, the sliced image stacks were downloaded from the Asiga printer web interface and converted into 3D voxel arrays using a custom script developed for this purpose using LabVIEW™ 2016 software (National Instruments, TX, USA). The 3D voxel arrays were then run through the bespoke algorithm developed for this study and reported in Chapter 5 to predict and mitigate for the effects of overcuring. When complete, the modified voxel array was re-sliced and converted back into a binary PNG image stack for upload to the 3D printer.

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EXHIBIT 5

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更新年月日:2021年07月28日
京都府/ 京都市下京区/ 株式会社

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検索

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株式会社Rosnes（ロスネス）は、法人番号:1130001028431で京都府京都市下京区鶏鉾町480番地オフィス-ワン四条烏丸に所在する法人として京都地方法務局で法人登録され、2015年10月05日に法人番号が指定されました。登録情報として、商標情報が1件が登録されています。なお、2021年07月16日に登録情報が変更されています。最終更新日は2021年07月28日です。この地域の労働局は京都労働局、京都下労働基準監督署が所轄の労働基準監督署です。

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株式会社Rosnesの法人活動情報

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不動産キャンプ合同会社
法人番号:3130003008248 / 更新:2022年10月19日
所在地:京都府京都市下京区鶏鉾町493番地ムーンバットビル7階

コネクト京都株式会社
法人番号:4130001049920 / 更新:2022年10月03日
所在地:京都府京都市下京区鶏鉾町493番地

有限会社京佳人
法人番号:1130002007013 / 更新:2022年09月29日
所在地:京都府京都市下京区室町通綾小路上る鶏鉾町480番地

株式会社くすのき建築企画
法人番号:8160001006361 / 更新:2022年06月03日
所在地:京都府京都市下京区室町通四条下る鶏鉾町480番地オフィスワン四条烏丸

合同会社暮らしイノベーション
法人番号:7120003017238 / 更新:2022年05月23日
所在地:京都府京都市下京区鶏鉾町493番地ムーンバットビル7階

株式会社GOLLE
法人番号:9130001036518 / 更新:2022年05月12日
所在地:京都府京都市下京区鶏鉾町482オフィス・ワン四条烏丸904号

アールイー株式会社
法人番号:3130001062734 / 更新:2022年04月26日
所在地:京都府京都市下京区鶏鉾町493番地ムーンバットビル7階704

あっと京都合同会社
法人番号:1130003006864 / 更新:2022年02月09日
所在地:京都府京都市下京区鶏鉾町493番地ムーンバットビル7階704

アールエスティ株式会社
法人番号:1130001022715 / 更新:2021年12月17日
所在地:京都府京都市下京区室町通四条下る鶏鉾町501番地

株式会社京都M&Aプランニング
法人番号:5130001038294 / 更新:2021年12月16日
所在地:京都府京都市下京区室町通綾小路上る鶏鉾町480番地オフィスワン四条烏丸11階

シナジーアカウンティング合同会社
法人番号:5130003006646 / 更新:2021年12月07日
所在地:京都府京都市下京区室町通綾小路上る鶏鉾町480番地オフィス-ワン四条烏丸403

株式会社嵯峨屋
法人番号:1130001056812 / 更新:2021年11月08日
所在地:京都府京都市下京区鶏鉾町474-2

所在地:京都府京都市下京区室町通綾小路上る鶏鉾町480番地オフィスワン四条烏丸11階

シナジーアカウンティング合同会社
法人番号:5130003006646 / 更新:2021年12月07日
所在地:京都府京都市下京区室町通綾小路上る鶏鉾町480番地オフィス-ワン四条烏丸403

株式会社嵯峨屋
法人番号:1130001056812 / 更新:2021年11月08日
所在地:京都府京都市下京区鶏鉾町474-2

前の法人:株式会社さか美　　次の法人:中辻造園土木工業株式会社

法人.info/ 京都府/ 京都市下京区/ 株式会社/ 株式会社Rosnes

法人.info

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EXHIBIT 6

This site can't be reached

appcloudmaster.com's server IP address could not be found.

Try:

- Checking the connection
- Checking the proxy, firewall, and DNS configuration
- Running Windows Network Diagnostics

ERR_NAME_NOT_RESOLVED

Reload

Details

Google Chrome	115.0.5790.170	11:09:02 AM 8/4/2023	Windows 10 Enterprise 64-bit Build 19044

EXHIBIT 7

Google

"diamond pixel" opnous

Images | Videos | Shopping | News | Maps | Books | Flights | Finance

All filters | Tools | SafeSearch

About 3 results (0.25 seconds)

Justia
https://trademarks.justia.com › owners › opnous-k-k-c...

OPNOUS K.K co., Ltd. Trademarks

DIAMOND PIXEL. Filed: January 28, 2020. Semi-conductors; semiconductor devices; integrated circuits; image sensors. Owned by: Rosnes Corporation and **OPNOUS** ...

USPTO .report
https://uspto.report › ...

DIAMOND PIXEL - Samsung Display Co., Ltd.

Mark For: **DIAMOND PIXEL**® trademark registration is intended to cover the categories of computer monitors; video monitors; computers; Television receivers; ...

法人.info
https://www.houjin.info › detail · Translate this page

OPNOUS株式会社 | 東京都千代田区

OPNOUS株式会社（オプナス）は、法人番号:2010001178766で東京都千代田区一番町4番地36-604に所在する法人 ... **OPNOUS**株式会社について（項目別） ... **Diamond Pixel**.

In order to show you the most relevant results, we have omitted some entries very similar to the 3 already displayed.
If you like, you can repeat the search with the omitted results included.

● **Southern United States** - Based on your past activity - Update location

More options in **Quick settings** (⚙)

EXHIBIT 8

DIAMOND PIXEL

Samsung Display Co., Ltd.

Application Filed: 2020-04-13

Trademark Application Details

DIAMOND PIXEL

Mark For: DIAMOND PIXEL® trademark registration is intended to cover the categories of computer monitors; video monitors; computers; Television receivers; cathode ray tubes; Plasma display panels; flat panel electroluminescent displays; diodes; Portable communication machines; Displays for portable communication equipment; MP3 players; Displays for MP3 players; MP4 Players; Displays for MP4 Players; Portable multimedia players; Displays for portable multimedia players; Vehicle navigation devices; Displays for

Show All

Status

LIVE APPLICATION Awaiting Examination

2020-04-16 UTC

Refresh

The trademark application has been accepted by the Office (has met the minimum filing requirements) and has not yet been assigned to an examiner.

The trademark application has been accepted by the Office (has met the minimum filing requirements) and has not yet been assigned to an examiner.

Research	OneLook Acronym Finder
Serial Number	88869753
Registration Number	6422005
Mark Literal Elements	DIAMOND PIXEL
Mark Drawing Type	4 - STANDARD CHARACTER MARK
Mark Type	Trademark
Current Location	NEW APPLICATION PROCESSING 2020-04-16
Basis	44(e)
Class Status	ACTIVE
Primary US Classes	021: Electrical Apparatus, Machines and Supplies 023: Cutlery, Machinery, Tools and Parts Thereof 026: Measuring and Scientific Appliances 036: Musical Instruments and Supplies 038: Prints and Publications
Primary International Class	009 - Primary Class (Electrical and scientific apparatus) Scientific, nautical, surveying, electric, photographic, cinematographic, optical, weighing, measuring, signaling, checking (supervision), lifesaving and teaching apparatus and instruments; apparatus for recording, transmission or reproduction of sound or images; magnetic data carriers, recording discs; automatic vending machines and mechanisms for coin operated apparatus; cash registers, calculating machines, data processing equipment and computers; fire-extinguishing apparatus.
Filed Use	No
Current Use	No
Intent To Use	No
Filed ITU	No
44D Filed	No
44E Current	Yes
66A Current	No
Current Basis	No
No Basis	No
Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

2014-07-04	Trademark Registered
2020-04-13	Application Filed
2020-04-16	Location: NEW APPLICATION PROCESSING
2020-04-16	Status: Live/Pending
2020-04-16	Status: New application will be assigned to an examining attorney approximately 3 months after filing date.
2020-04-16	Transaction Date
2021-07-13	Trademark Registered

Trademark Parties (Applicants & Owners)

Party:	Samsung Display Co., Ltd.
Address	1, Samsung-ro, Giheung-gu Yongin-si, Gyeonggi-do KOREA, REPUBLIC OF 17113
Legal Entity Type	Limited Company (ltd.)
Legal Entity State	KOREA, REPUBLIC OF

Documents

Application	MULTI	2020-04-13

Attorney Name	David A. Plumley
Attorney Docket Number	188997

Timeline

2014-07-04	Trademark Registered
2020-04-13	Application Filed
2020-04-16	Location: NEW APPLICATION PROCESSING
2020-04-16	Status: Live/Pending
2020-04-16	Status: New application will be assigned to an examining attorney approximately 3 months after filing date.
2020-04-16	Transaction Date
2021-07-13	Trademark Registered

Trademark Parties (Applicants & Owners)

Party:	Samsung Display Co., Ltd.
Address	1, Samsung-ro, Giheung-gu Yongin-si, Gyeonggi-do KOREA, REPUBLIC OF 17113
Legal Entity Type	Limited Company (ltd.)
Legal Entity State	KOREA, REPUBLIC OF

Documents

Application	MULTI	2020-04-13

Documents

Application	MULTI	2020-04-13
Drawing	JPEG	2020-04-13

Attorney of Record

DAVID A. PLUMLEY
LEWIS ROCA ROTHGERBER CHRISTIE LLP
P.O. BOX 29001
GLENDALE, CA 91209-9001

Good, Services, and Codes

International Codes:	9
U.S. Codes:	021,023,026,036,038

Type Code	Type
D10000	"PIXEL"
D10000	"PIXEL"

EXHIBIT 9

Rosnes Corporation Trademarks

Rosnes

ROSNES

Filed: February 3, 2011

Telecommunication devices and apparatus for capturing and/or processing images; parts for telecommunication devices and...

Owned by: Rosnes Corporation

Serial Number: 79094570

Diamond Pixel

DIAMOND PIXEL

Filed: January 28, 2020

Semi-conductors; semiconductor devices; integrated circuits; image sensors

Owned by: Rosnes Corporation and OPNOUS K.K co., Ltd.

Serial Number: 79281958

EARTH CAMERA

EARTH CAMERA

cameras; camera parts and accessories; television cameras; digital cameras; digital camcorders; network cameras; panoramic...

Owned by: Rosnes Corporation and KANEMATSU (CHINA) Co., Ltd.

Serial Number: 86056930

Justia Legal Resources

EARTH CAMERA
digital camcorders; network cameras; panoramic...
Owned by: Rosnes Corporation and KANEMATSU (CHINA) Co., Ltd.
Serial Number: 86056930

EXHIBIT 10

法人.info

法人番号:2010001178766

OPNOUS株式会社

更新年月日:2022年10月12日
東京都/ 千代田区/ 株式会社

OPNOUS株式会社の場所

検索

法人名か法人番号

OPNOUS株式会社について

OPNOUS株式会社（オプナス）は、法人番号:2010001178766で東京都千代田区一番町4番地36-604に所在する法人として東京法務局で法人登録され、2016年10月07日に法人番号が指定されました。登録情報として、商標情報が1件が登録されています。なお、2022年10月04日に登録情報が変更されています。最終更新日は2022年10月12日です。この地域の労働局は東京労働局。中央労働基準監督署が所轄の労働基準監督署です。

OPNOUS株式会社について（項目別）

項目	内容
商号又は名称	OPNOUS株式会社
商号又は名称（読み仮名）	オプナス
法人番号	2010001178766
会社法人等番号	0100-01-178766
登記所	東京法務局 ※法人設立時に登記が提出された登記所を表示しています。
法人種別	株式会社
郵便番号	〒102-0082 ※地方自治体コードは 13101
国内所在地（都道府県）	東京都 ※東京都の法人数は 1,225,838件
国内所在地（市区町村）	千代田区 ※千代田区の法人数は 90,687件
国内所在地（丁目番地等）	一番町4番地36-604
国内所在地（1行表示）	東京都千代田区一番町4番地36-604
国内所在地（読み仮名）	-
更新年月日	2022年10月12日
変更年月日	2022年10月04日
法人番号指定年月日	2016年10月07日

検索

法人名か法人番号
法人種別
都道府県
市町村
番地以降
検索

SNSでシェアする

関連リンク

- 東京都の法人一覧
- 東京都千代田区の法人一覧
- 東京都千代田区の株式会社の法人一覧

昨日の東京都の法人アクセスランキング

- 1位 八島興産合同会社(9)
- 2位 株式会社Ace'S Corporation(7)
- 3位 株式会社kmビジネスサービス(7)
- 4位 エントリー株式会社(6)
- 5位 マークモニター・ジャパン合同会社(6)
- 6位 株式会社シグマシステムエンジニアリング(6)
- 7位 New Being株式会社(5)
- 8位 シーレックス・ファシリティーズ株式会社(5)
- 9位 デジタルバリューチェーンパートナーズ

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国内所在地（読み仮名）	-
更新年月日	2022年10月12日
変更年月日	2022年10月04日
法人番号指定年月日	2016年10月07日
管轄の労働局	東京労働局 〒102-8305～〒102-8307 東京都千代田区九段南1丁目2番1号 九段第3合同庁舎12階～14階
管轄の労働基準監督署	中央労働基準監督署 〒112-8573 東京都文京区後楽1-9-20飯田橋合同庁舎6・7階

国税庁法人番号公表サイトで確認

OPNOUS株式会社の登録履歴

日付	内容
2022年10月04日	【住所変更】 国内所在地が「東京都千代田区一番町4番地36-604」に変更されました。
2016年10月07日	【新規登録】 名称が「OPNOUS株式会社」で、「東京都千代田区麹町1丁目5番地4ライオンズステーションプラザ半蔵門713号」に新規登録されました。

OPNOUS株式会社の法人活動情報

商標
(1件)

OPNOUS株式会社の商標情報(1件)

日付 公表組織 / 種類	活動対象 / 分類等
2019年10月11日	Diamond Pixel

7位 New Being株式会社(5)

8位 シーレックス・ファシリティーズ株式会社(5)

9位 デジタルバリューチェーンパートナーズ合同会社(5)

10位 全日本通信サービス株式会社(5)

全てを見る

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OPNOUS株式会社の商標情報(1件)

日付 公表組織 / 種類	活動対象 / 分類等
2019年10月11日 特許庁 / 商標	Diamond Pixel 09類

OPNOUS株式会社の閲覧回数

OPNOUS株式会社の近くの法人

READYFOR株式会社
法人番号:3010001161630 / 更新:2023年07月31日
所在地:東京都千代田区一番町8住友不動産一番町ビル7階

株式会社バート
法人番号:9010001073572 / 更新:2023年07月28日
所在地:東京都千代田区一番町6番地4

有限会社パインウッド
法人番号:9010002013437 / 更新:2023年07月27日
所在地:東京都千代田区一番町22番地5

株式会社Ubicomホールディングス
法人番号:8010401059998 / 更新:2023年07月24日
所在地:東京都千代田区一番町21番地

株式会社エーアイエス
法人番号:9010001102166 / 更新:2023年07月24日
所在地:東京都千代田区一番町21番地

株式会社IMAGICA GEEQ
法人番号:8011001033220 / 更新:2023年07月20日
所在地:東京都千代田区一番町21番地

株式会社UME
法人番号:7010001236908 / 更新:2023年07月18日
所在地:東京都千代田区一番町6番地4-1301号

GCシステム株式会社
法人番号:5010001236637 / 更新:2023年07月06日

所在地:東京都千代田区一番町21番地

株式会社UME
法人番号:7010001236908 / 更新:2023年07月18日
所在地:東京都千代田区一番町6番地4-1301号

GCシステム株式会社
法人番号:5010001236637 / 更新:2023年07月06日
所在地:東京都千代田区一番町10番地9-601号

株式会社雅芳堂
法人番号:9010001236550 / 更新:2023年07月06日
所在地:東京都千代田区一番町3番地8

クロノアドバイザーズ株式会社
法人番号:9010401100629 / 更新:2023年07月06日
所在地:東京都千代田区一番町21番地3

株式会社ボディクエスト
法人番号:4010001143941 / 更新:2023年07月03日
所在地:東京都千代田区一番町6番地

株式会社もんじ
法人番号:4010001216581 / 更新:2023年06月29日
所在地:東京都千代田区一番町10番8号一番町ウエストビル5階

株式会社ナビゲータープラットフォーム
法人番号:1011301019347 / 更新:2023年06月26日
所在地:東京都千代田区一番町21番地

株式会社モニクル
法人番号:3010001221582 / 更新:2023年06月26日
所在地:東京都千代田区一番町21番地

株式会社OneMile Partners
法人番号:9010401142340 / 更新:2023年06月26日
所在地:東京都千代田区一番町21番地

株式会社ポラリス
法人番号:9021001060717 / 更新:2023年06月26日
所在地:東京都千代田区一番町14番地2パークコート一番町605号

日本デリカフーズ協同組合
法人番号:7010005007628 / 更新:2023年06月22日
所在地:東京都千代田区一番町21番地

Honmono Japan株式会社
法人番号:8021001076879 / 更新:2023年06月22日
所在地:東京都千代田区一番町3-7カーサー番町202号室

トンダ株式会社
法人番号:2011501028337 / 更新:2023年06月21日
所在地:東京都千代田区一番町23番地2番町ロイヤルコート806

株式会社Gemax
法人番号:6010401118137 / 更新:2023年06月16日
所在地:東京都千代田区一番町10番地8一番町ウェストビル5階

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前の法人:株式会社マイナビダイレクト
次の法人:株式会社リヴァストーン

所在地:東京都千代田区一番町3-7カーサー番町202号室

トンダ株式会社
法人番号:2011501028337 / 更新:2023年06月21日
所在地:東京都千代田区一番町23番地2番町ロイヤルコート806

株式会社Gemax
法人番号:6010401118137 / 更新:2023年06月16日
所在地:東京都千代田区一番町10番地8一番町ウェストビル5階

前の法人:株式会社マイナビダイレクト　　次の法人:株式会社リヴァストーン

法人.info/ 東京都/ 千代田区/ 株式会社/ OPNOUS株式会社

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EXHIBIT 11

News

[Analog circuit/Layout design and verification contract business start]

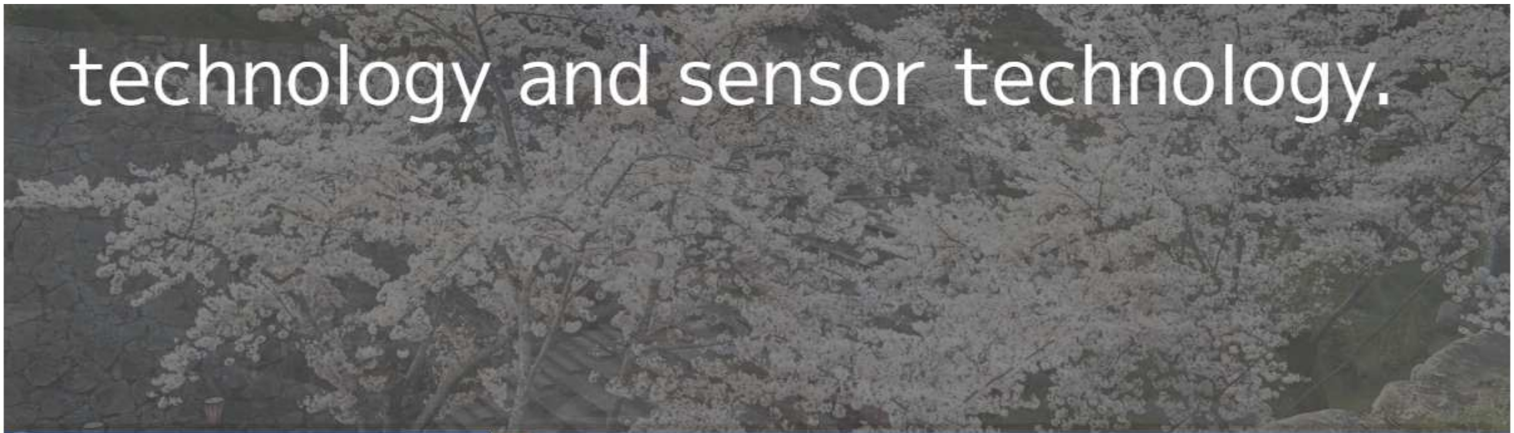
2021-08-01

We started an analog circuit/layout design and verification contract business. Our engineers with a wealth of experience, knowledge, and skills utilize technologies such as ADC, DAC, PLL, and DLL to meet the diverse needs of our customers with the following three pillars. 1) Respond flexibly to your requests. 2) Realize quality that satisfies you. 3)[…続きを読む]

[Start three-dimensional (3D) CMOS sensors development for distance measurement !!!]

2021-04-18

Rosnes was established in January 2007, and for the past 15 years has been developing 2D-CMOS sensors such as smart phone, security camera and medical etc… During the time, 2D-CMOS sensors technology didn't expand strongly, so, new attractive 2D-CMOS sensors was not developed a lot. As a result, many of the independent and venture companies[…続きを読む]



News

Analog circuit/Layout design and verification contract business start

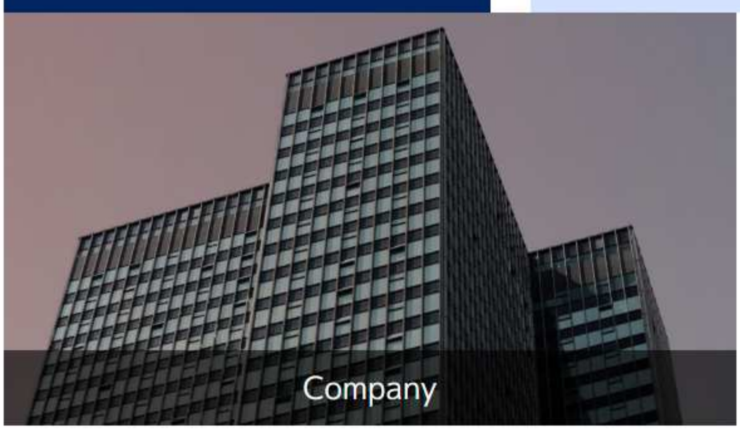
2021-08-01

We started an analog circuit/layout design and verification contract business. Our engineers with a wealth of experience, knowledge, and skills utilize technologies such as ADC, DAC, PLL, and DLL to meet the diverse needs of our customers with the following three pillars. 1) Respond flexibly to your requests. 2) Realize quality that satisfies you. 3)[…続きを読む]

Start three-dimensional (3D) CMOS sensors development for distance measurement !!!

2021-04-18

Rosnes was established in January 2007, and for the past 15 years has been developing 2D-CMOS sensors such as smart phone, security camera and medical etc… During the time, 2D-CMOS sensors technology didn't expand strongly, so, new attractive 2D-CMOS sensors was not developed a lot. As a result, many of the independent and venture companies[…続きを読む]



Rosnes
Rosnes Corporation

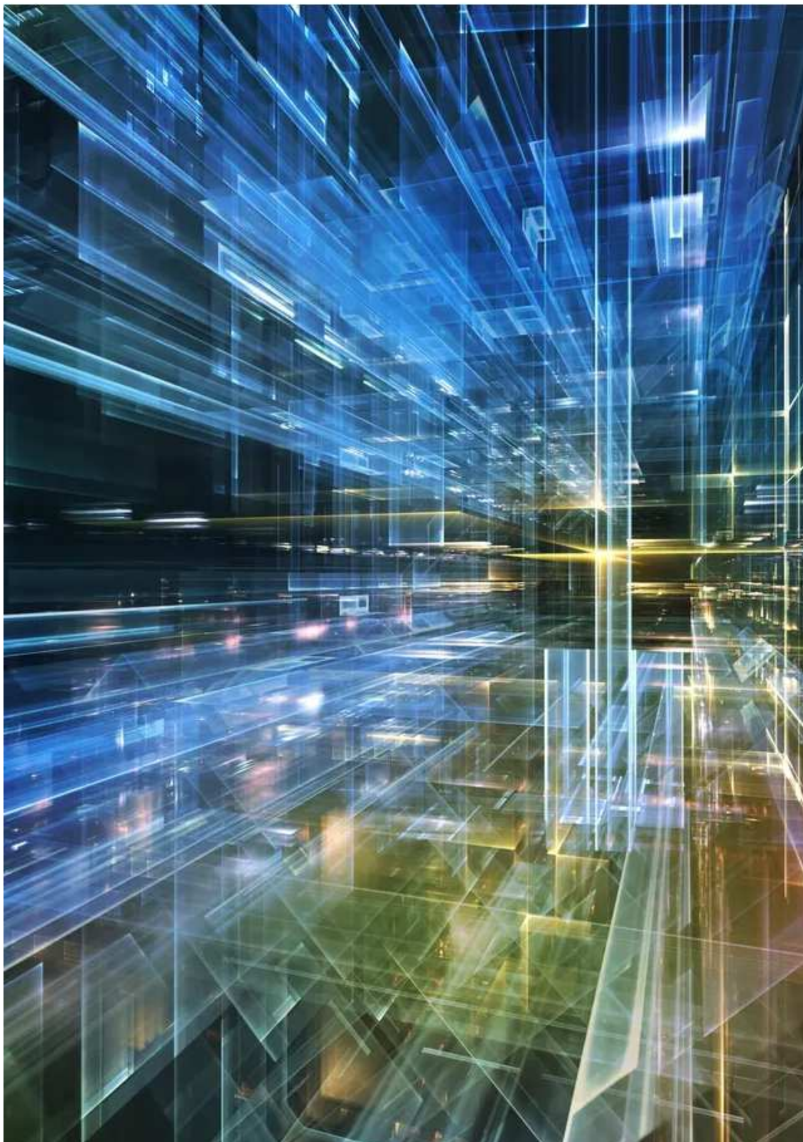
Office One Shijo-Karasuma 602
480, Niwatoriboko-cho, Shimogyo-ku, Kyoto, JAPAN

TEL:+81-075-352-7002
FAX:+81-075-352-7003

Contact

EXHIBIT 12

OPNOUS
SMART SENSING & AI TECHNOLOGY



Present a smarter world

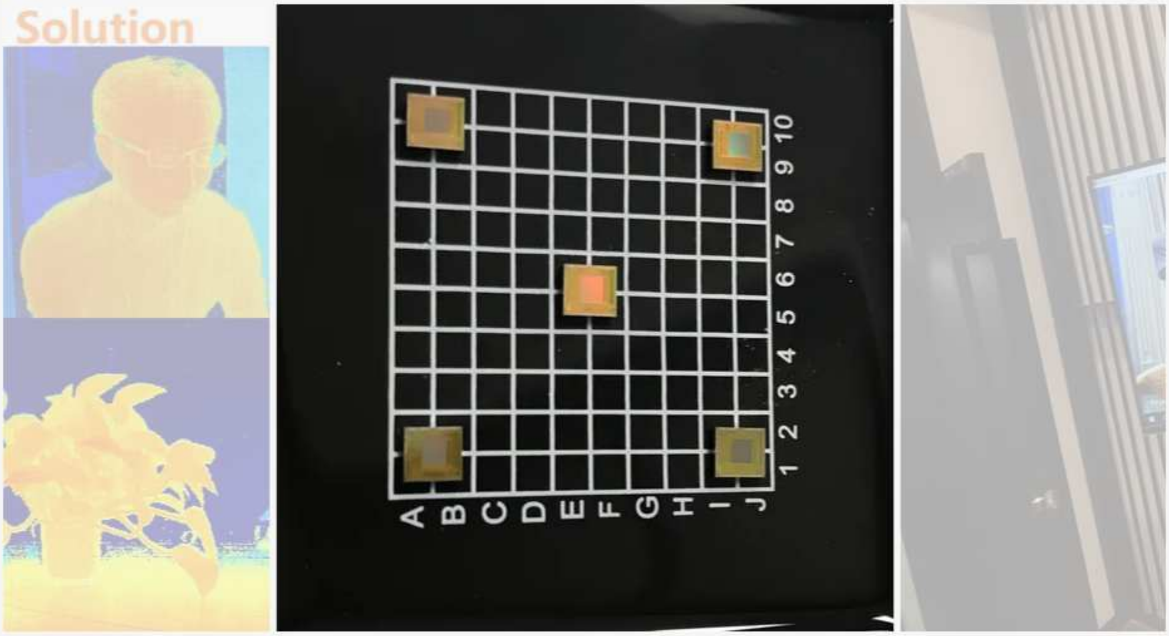
with optical intelligence

WE SENSE THEREFORE WE ARE

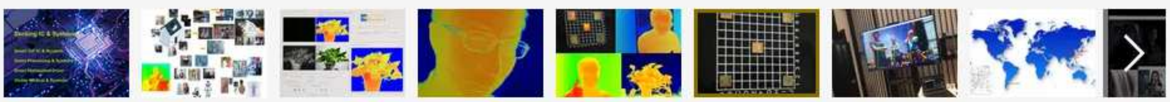
Products

Updates

Solution



ToF ICs



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OPNOUS * Smart Sensing & AI Technology

EXHIBIT 13

diamond pixel site:rosnes.jp

Images | Videos | Shopping | Value | Layout | Minecraft | Ring | News | Samsung

All filters | Tools | SafeSearch

Sign in

About 0 results (0.25 seconds)

Your search - **diamond pixel site:rosnes.jp** - did not match any documents.

Suggestions:

- Make sure all words are spelled correctly.
- Try different keywords.
- Try more general keywords.
- Try fewer keywords.

● **Southern United States** - Based on your past activity - Update location

More options in **Quick settings** (⚙)

EXHIBIT 14

diamond pixel site:https://opnous.co.jp

Sign in

Images | Videos | Shopping | Value | Layout | Minecraft | Ring | News | Samsung

All filters | Tools | SafeSearch

About 0 results (0.30 seconds)

Your search - **diamond pixel site:https://opnous.co.jp** - did not match any documents.

Suggestions:

- Make sure all words are spelled correctly.
- Try different keywords.
- Try more general keywords.
- Try fewer keywords.

● **Southern United States** - Based on your past activity - Update location

More options in **Quick settings** ( )

EXHIBIT 15

diamond site:rosnes.jp

Images Videos Shopping Price Necklace Ring Earrings Shapes Photo

All filters Tools SafeSearch

About 1 results (0.29 seconds)

rosnes.jp
http://www.rosnes.jp › kigyou_en

Since 2018/11/28

Major stock holders, ・NTT Finance ・Mitsuboshi **Diamond** Industrial ・Ikeda Senshu Capital ・Mitsubishi UFJ Capital ・Takumi Yamaguchi ; President, ・CEO : ...

Southern United States - Based on your past activity - Update location

More options in **Quick settings** ( )

EXHIBIT 16

[Japanese]

Rosnes

Since 2018/11/28

Home | Corporate Information | Business | Product | Contact | Recruit

new

Corporate profile

Corporate Name	・Rosnes Corporation
Address	・AYA Shijo Karasuma Bldg. 3F-302 167, Dojisha-cho, Shimogyo-ku, Kyoto, 6008421 JAPAN ・TEL : +81-75-352-7002 ・FAX : +81-75-352-7003
Foundation	・Jan. 24th, 2007
Capital	・156million JPY
Major stock holders	・NTT Finance ・Mitsuboshi Diamond Industrial ・Ikeda Senshu Capital ・Mitsubishi UFJ Capital ・Takumi Yamaguchi
President	・CEO： Takumi Yamaguchi
Headcount	・15
Business	・Custom image sensor business ・Camera module business ・Camera business
Main financial bank	・Kyoto Chuo Shinkin Bank ・Sumitomo Mitsui Banking Corporation

Corporate information

- Greeting
- Access

History

- 2007 Jan. Rosnes founded
- 2007 Feb. Established Kyoto design center in Kyoto Research Park
- 2007 Feb. Started image sensor development project
- 2007 Jun. Started OEM
- 2008 Jan. Started embedded software development
- 2008 Jan. Stared image signal processing project
- 2008 Oct. Kyoto design center was relocated to Shijo Karasuma
- 2009 Apr. Started module development
- 2009 Aug.Started use medical image sensor development
- 2008 Apr. Started camera development
- 2012 Apr. Started network camera project.
- 2012 Oct. Started recognition camera development
- 2013 Jan. Started security use image sensor development
- 2017 Nov. Started BSI image sensor development
- 2018 Mar. Started 3D stacked image sensor development

EXHIBIT 17

Google

diamond site:https://opnous.co.jp/

Sign in

Images | Videos | Shopping | Price | Necklace | Ring | Earrings | Shapes | Photo

All filters | Tools | SafeSearch

About 0 results (0.36 seconds)

Your search - **diamond site:https://opnous.co.jp/** - did not match any documents.

Suggestions:

- Make sure all words are spelled correctly.
- Try different keywords.
- Try more general keywords.
- Try fewer keywords.

● **Southern United States** - Based on your past activity - Update location

More options in **Quick settings** (⚙)

EXHIBIT 18

INTERNET ARCHIVE WayBackMachine

Explore more than 826 billion web pages saved over time

http://rosnes.jp/en

22 URLs have been captured for this URL prefix.

Filter results by URL or MIME Type (i.e. '.txt')

URL ↑	MIME Type	From	To	Captures	Duplicates	Uniques
http://rosnes.jp/en/2020/11/	text/html	Nov 25, 2020	Jul 26, 2021	7	2	5
http://rosnes.jp/en/2021/03/	text/html	Apr 18, 2021	Apr 18, 2021	1	0	1
http://rosnes.jp/en/2021/04/	text/html	Apr 18, 2021	May 31, 2023	6	2	4
http://rosnes.jp/en/2021/08/	text/html	Oct 3, 2022	Mar 23, 2023	4	1	3
http://rosnes.jp/en/analog-circuit-layout-design-and-verification-contract-business-start/	text/html	Oct 3, 2022	May 31, 2023	4	0	4
http://rosnes.jp/en/author/admin/	text/html	Dec 4, 2022	Dec 4, 2022	1	0	1
http://rosnes.jp/en/business-2/	text/html	Sep 26, 2020	May 31, 2023	9	2	7
http://rosnes.jp/en/category/kyoto-intro/	text/html	Apr 18, 2021	Jul 26, 2021	5	2	3
http://rosnes.jp/en/category/news-en/	text/html	Nov 25, 2020	May 30, 2023	9	2	7
http://rosnes.jp/en/company-2/	text/html	Sep 26, 2020	May 31, 2023	10	1	9
http://rosnes.jp/en/contact/	text/html	Sep 26, 2020	May 30, 2023	8	1	7
http://rosnes.jp/en/creating-a-cmos-sensor-business-for-three-dimensional-3d-distance-measurement/	text/html	Apr 18, 2021	Apr 18, 2021	1	0	1
http://rosnes.jp/en/creation-of-an-own-brand-business-for-new-cmos-sensors-2/	text/html	Apr 18, 2021	Apr 18, 2021	1	0	1
http://rosnes.jp/en/creation-of-an-own-brand-business-for-new-cmos-sensors/	text/html	May 11, 2021	Aug 19, 2022	7	0	7
http://rosnes.jp/en/establishment-of-a-cmos-sensor-business-for-three-dimensional-3d-distance-measurement/	text/html	May 11, 2021	May 30, 2023	6	2	4
http://rosnes.jp/en/news-2/	text/html	Sep 26, 2020	May 31, 2023	11	1	10
http://rosnes.jp/en/product-2/	text/html	Sep 26, 2020	May 31, 2023	10	2	8
http://rosnes.jp/en/recruit-2/	text/html	Sep 26, 2020	Mar 23, 2023	11	0	11
http://rosnes.jp/en/rosnes-inc/	text/html	Sep 26, 2020	Jun 8, 2023	26	8	18
http://rosnes.jp/en/survey-of-feasibility-of-commercialization-of-virtual-kyoto-sightseeing-tour/	text/html	Nov 25, 2020	Oct 23, 2021	8	1	7
http://rosnes.jp/en/we-finished-the-feasibility-study-of-the-virtual-tour-business/	text/html	Apr 18, 2021	Apr 18, 2021	1	0	1
http://rosnes.jp/enkaku.gif	image/gif	Dec 30, 2013	Nov 22, 2018	4	3	1

Showing 1 to 22 of 22 entries

First Previous 1 Next Last

EXHIBIT 19

DONATE

INTERNET ARCHIVE WaybackMachine

Explore more than 826 billion web pages saved over time

https://opnous.co.jp

Calendar · Collections · Changes · Summary · Site Map · URLs

5 URLs have been captured for this URL prefix.

Filter results by URL or MIME Type (i.e. '.txt')

URL ↑	MIME Type	From	To	Captures	Duplicates	Uniques
http://opnous.co.jp/	unk	Dec 18, 2021	Oct 26, 2022	5	3	2
http://opnous.co.jp/favicon.ico	unk	Feb 19, 2022	Feb 19, 2022	1	0	1
http://opnous.co.jp/robots.txt	unk	Dec 18, 2021	Oct 26, 2022	6	4	2
https://opnous.co.jp/sitemap.website.xml	application/xml	Oct 26, 2022	Oct 26, 2022	1	0	1
https://opnous.co.jp/sitemap.xml	application/xml	Oct 26, 2022	Oct 26, 2022	1	0	1

Showing 1 to 5 of 5 entries

First Previous 1 Next Last