

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

GlobalFoundries U.S. Inc.

Petitioner

v.

Godo Kaisha IP Bridge 1

Patent Owner

Patent No. 6,197,696

Filing Date: March 23, 1999

Issue Date: March 6, 2001

Title: METHOD FOR FORMING INTERCONNECTION STRUCTURE

---

*Inter Partes* Review No. *IPR2017-00921*

---

**PETITION FOR INTER PARTES REVIEW  
UNDER 35 U.S.C. §§ 311-319 AND 37 C.F.R. § 42.100 ET SEQ.**

## Table of Contents

<b>I.</b>	<b>Preliminary Statement.....</b>	<b>1</b>
<b>II.</b>	<b>Technological Background.....</b>	<b>1</b>
	A. Integrated Circuits and Interconnections .....	1
	B. Semiconductor Etching and Photolithography .....	4
<b>III.</b>	<b>The '696 Patent .....</b>	<b>6</b>
	A. Description of the Challenged Claims .....	6
	B. Examination of the '696 Patent.....	15
	C. The Challenged Claims Are Not Entitled to the Benefit of Foreign Priority .....	16
	1. The first, second, and fourth embodiments of the '371 application do not disclose step g) of claim 13.....	17
	2. The third, variant of the third, and fourth embodiments do not disclose step h) of claim 13 .....	18
	3. The third, variant of the third, and fourth embodiments do not disclose step i) of claim 13.....	20
<b>IV.</b>	<b>Statement of Precise Relief Requested for Each Claim Challenged .....</b>	<b>21</b>
	A. Claims for Which Review is Requested .....	21
	B. Statutory Grounds of Challenge.....	21
	C. Level of Ordinary Skill .....	21
	D. Claim Construction .....	22
<b>V.</b>	<b>Claims 13 and 15 of the '696 Patent Are Unpatentable Over the Prior Art .....</b>	<b>22</b>
	A. Disclosures of the Prior Art .....	22
	1. <i>Grill</i> (U.S. Patent No. 6,140,226).....	22
	2. <i>Aoyama</i> (U.S. Patent No. 5,592,024).....	28
	B. <i>Grill</i> Renders Claim 13 Obvious .....	30
	1. Claim 13 is obvious in view of <i>Grill</i> .....	30
	C. The Combination of <i>Grill</i> and <i>Aoyama</i> Renders Claims 13 and 15 Obvious.....	42
	1. A POSITA would have combined the relevant teachings of <i>Grill</i> and <i>Aoyama</i> .....	42
	2. Claim 13 is obvious in view of the <i>Grill-Aoyama</i> combination .....	46
	3. Claim 15 is obvious in view of the <i>Grill-Aoyama</i> combination .....	56
<b>VI.</b>	<b>Mandatory Notices Under 37 C.F.R. §42.8.....</b>	<b>60</b>
	A. Real Parties-In-Interest .....	60

B.	Related Matters .....	60
C.	Lead and Back-Up Counsel .....	62
D.	Service Information .....	62
<b>VII.</b>	<b>Certification Under 37 C.F.R. §42.24(d)</b> .....	<b>63</b>
<b>VIII.</b>	<b>Payment of Fees</b> .....	<b>63</b>
<b>IX.</b>	<b>Time for Filing Petition</b> .....	<b>63</b>
<b>X.</b>	<b>Grounds for Standing</b> .....	<b>63</b>
<b>XI.</b>	<b>Conclusion</b> .....	<b>63</b>

## TABLE OF AUTHORITIES

**Page(s)**

### FEDERAL CASES

<i>Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015).....	24
<i>Exergen Corp. v. Wal-Mart Stores, Inc.</i> , 575 F.3d 1312 (Fed. Cir. 2009).....	41, 54
<i>Fiers v. Revel</i> , 984 F.2d 1164 (Fed. Cir. 1993).....	18
<i>In re Ziegler</i> , 992 F.2d 1197 (Fed. Cir. 1993).....	19
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007).....	45
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005) (en banc).....	24
<i>Upsher-Smith Labs., Inc. v. PamLab L.L.C.</i> , 412 F.3d 1319 (Fed. Cir. 2005).....	31

### REGULATORY CASES

<i>Ariosa Diagnostics, Inc. v. Illumina, Inc.</i> , IPR2014-01093, Paper 69 (Jan. 7, 2016).....	24
--	----

### ADMINISTRATIVE PROCEEDINGS

IPR2016-01377, IPR2016-01378 .....	60
LLC, PGR2015-00022, Paper 8 (Feb. 19, 2016) .....	18

### FEDERAL STATUTES

35 U.S.C.....	23
35 U.S.C. § 103.....	23, 61
35 U.S.C. §§ 311–319.....	3
35 U.S.C. § 311(c) .....	62

## FEDERAL REGULATIONS

37 C.F.R. § 42.8 .....	60, 62
37 C.F.R. § 42.24 .....	62
37 C.F.R. § 42.24(D) .....	62
37 C.F.R. § 42.100(b) .....	24
37 C.F.R. § 42.100 <i>et seq.</i> .....	3
37 C.F.R. § 42.101(b) .....	62
37 C.F.R. § 42.102(a) .....	62
37 C.F.R. §§ 42.103(a) and 42.15(a) .....	62
37 C.F.R. § 42.104(a) .....	62
37 C.F.R. § 42.108 .....	18

## PATENTS

U.S. Patent No. 3,617,824 .....	3
U.S. Patent No. 5,592,024 .....	29
U.S. Patent No. 6,140,226 .....	24
U.S. Patent No. 6,197,696 .....	passim

## MISCELLANEOUS

Although <i>Grill</i> .....	25
Further, <i>Grill</i> .....	32
<i>Grill</i> at 4:60– 5:8 and 7:16–8:8 .....	31
<i>Grill</i> at 4:60–5:8 and 7:16–8:8 .....	42
<i>Grill</i> 's Figure 5A .....	25
<i>Grill</i> 's Figure 5A .....	32, 33, 34
<i>Grill</i> 's Figure 5B .....	35
<i>Grill</i> 's Figure 5C .....	36

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.