Trials@uspto.gov
571-272-7822

Paper 9
Date: August 16, 2017

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY LIMITED,
Petitioner,

v.

GODO KAISHA IP BRIDGE 1,
Patent Owner.

Case IPR2017-00931
Patent RE41,980 E

Before JUSTIN T. ARBES, MICHAEL J. FITZPATRICK, and JENNIFER MEYER CHAGNON, *Administrative Patent Judges*.

FITZPATRICK, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 325(d)

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

I. INTRODUCTION

Petitioner, Taiwan Semiconductor Manufacturing Company Limited, filed a Petition to institute an *inter partes* review of claims 18, 19, 30–36, and 47–51 of U.S. Patent No. RE41,980 E (Ex. 1001, "the '980 patent") pursuant to 35 U.S.C. § 311(a). Paper 1 ("Pet."). Patent Owner, Godo Kaisha IP Bridge 1, filed a Preliminary Response under 35 U.S.C. § 313. Paper 8 ("Prelim. Resp.").

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a). We deny the Petition under 35 U.S.C. § 325(d).

A. Related Matters

The '980 patent issued from Serial No. 11/984,551, which was a continuation reissue application of Serial No. 10/438,348 (now U.S. Patent No. RE39,932), which was a reissue application of Serial No. 09/387,834 (now U.S. Patent No. 6,232,656), which was a divisional application of Serial No. 08/925,442 (now U.S. Patent No. 5,989,992), which was filed September 8, 1997. Ex. 1001, 1:10–20.

Patent Owner has asserted the '980 patent in *Godo Kaisha IP Bridge 1 v. Broadcom Ltd.*, No. 2-16-cv-00134 (E.D. Tex.). Pet. 72; Paper 3, 2.

Petitioner has previously petitioned for two *inter partes* reviews of the '980 patent. Those petitions were denied. IPR2016-01331, Paper 9; IPR2016-01367, Paper 8.

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

B. The ’980 Patent

The ’980 patent “relates to a semiconductor device having a metal wire layer and a passivation film in the uppermost layer” and, more particularly, to “improvement in the structures of a bonding pad and a surface protecting film.” Ex. 1001, 1:23–27. The stated “object” of the ’980 patent is “providing a semiconductor device having high integration, high reliability[,] and high performance . . . by decreasing a parasitic capacitance between metal wires with a small pitch in a metal wire layer, by preventing a coverage defect in depositing a silicon nitride film used as a passivation film, and by suppressing moisture absorption through an opening for forming a bonding pad.” *Id.* at 2:40–48.

Figure 1 of the ’980 patent is reproduced below.

Fig. 1

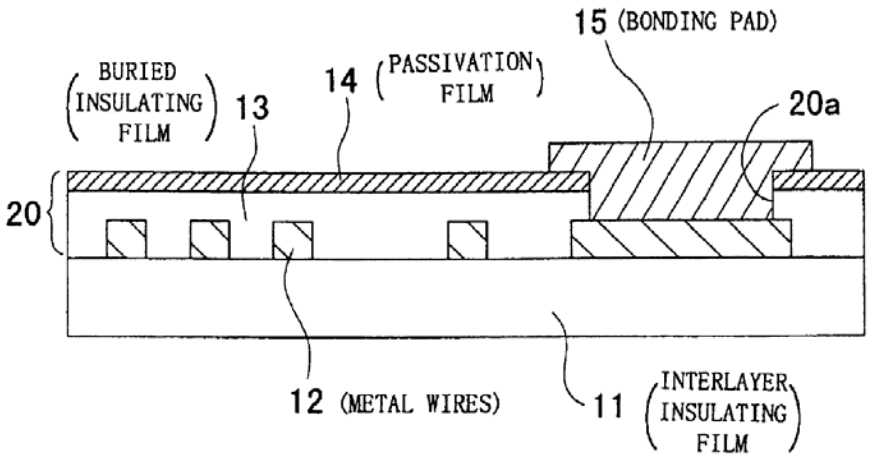

Figure 1 shows a sectional view of a semiconductor device embodiment of the invention of the ’980 patent. *Id.* at 6:21–23. The embodiment includes interlayer insulating film 11 on which is formed a metal wire layer including a plurality of metal wires 12. *Id.* at 7:29–32.

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

Surface protecting film 20 covers the interlayer insulating film and the metal wires. *Id.* at 7:33–35. The surface protecting film "is a composite film including a buried insulating film 13 of an insulating film with a small dielectric constant (such as a TEOS film) and a passivation film 14 of an insulating film with a large dielectric constant and high moisture absorption resistance (such as a silicon nitride film)." *Id.* at 7:35–40. Bonding pad 15 is buried in opening 20a of the surface protecting film, completely covers the side faces of the buried insulating film, and is drawn above the passivation film. *Id.* at 7:43–49.

C. The Challenged Claims

Of the challenged claims, claims 18 and 35 are independent. Claim 18 is illustrative and reproduced below.

> 18. A semiconductor device comprising:
>
> a semiconductor substrate bearing semiconductor elements;
>
> an interlayer insulating film formed on said semiconductor substrate;
>
> a metal wire layer including plural metal wires formed on said interlayer insulating film;
>
> a surface protecting film including a first dielectric film with a small dielectric constant for filling at least a part of areas among said metal wires in said metal wire layer and a second dielectric film with a higher moisture absorption preventing function than said first dielectric film for covering said metal wire layer and said first dielectric film, said second dielectric film having a function of suppressing moisture absorption of said first dielectric film;
>
> an opening for a bonding pad formed in said surface protecting film; and

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

a bonding pad formed in said opening for obtaining external electrical connection,

wherein said bonding pad in said opening and said second dielectric film of said surface protecting film completely cover said first dielectric film so as not to expose said first dielectric film.

D. Asserted Grounds of Unpatentability

Petitioner asserts the following grounds of unpatentability:

Reference(s)	**Basis**[1]	**Claims**
Ting (Ex. 1006)[2]	§ 102(a), (b) and (e)	18, 19, 30–36, and 47–51
Ting and Jeng (Ex. 1007)[3]	§ 103(a)	18, 19, 30–36, and 47–51

Pet. 20.

II. ANALYSIS

There is no right to an *inter partes* review. *See* 35 U.S.C. § 314 (governing institution of *inter partes* reviews but not mandating institution

---

[1] The Leahy-Smith America Invents Act ("AIA"), Pub. L. No. 112-29, which was enacted on September 16, 2011, made amendments to 35 U.S.C. §§ 102 and 103. AIA § 3(b) and (c). Those amendments became effective eighteen months later on March 16, 2013. Because the application from which the '980 patent issued was filed before March 16, 2013, our citations to 35 U.S.C. §§ 102 and 103 are to their pre-AIA versions.

[2] U.S. Patent No. 5,169,680 to Ting et al. was filed March 11, 1992, and issued December 8, 1992. The earliest possible effective filing date of the challenged claims of the '980 patent is September 10, 1996. Ex. 1001, [30]. Thus, Ting is prior art under at least 35 U.S.C. § 102(b).

[3] U.S. Patent No. 5,527,737 to Jeng was filed May 27, 1994, and issued June 18, 1996. Jeng is prior art under at least 35 U.S.C. § 102(a).

DOCKET ALARM
Find authenticated court documents without watermarks at docketalarm.com.

DOCKET ALARM

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.