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[EPODOC: SS 50] (sensor 1w embedded) and waveguide

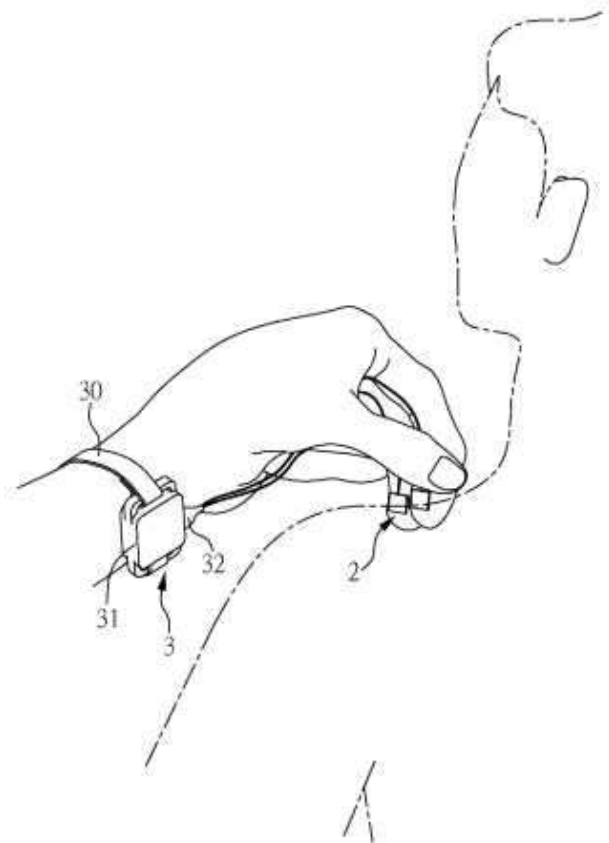
Results in EPODOC 4

[SS 51] ..li



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- PN - [US2016015271](#) A1 20160121
- PR - US201414335308 20140718
- AP - US201414335308 20140718
- DT - *; Rep
- CCI - [A61B5/0053](#) ; [A61B5/6824](#) ;
[A61B5/6826](#) ; [A61B5/6843](#)
- CCA - [A61B5/0004](#) ;
[A61B2562/0247](#) ;
[A61B2562/0266](#) ;
[A61B2562/164](#)
- CI - A61B5/0053 (EP, US)
A61B5/6824 (EP)
A61B5/6826 (EP, US)
A61B5/6843 (EP)
- CA - A61B5/0004 (EP, US)
A61B2562/0247 (EP, US)
A61B2562/0266 (EP, US)
A61B2562/164 (EP, US)
- PA - UNIV NAT CHENG KUNG [TW]
- TI - PALPATION DIAGNOSTIC
DEVICE
- AB - The present invention relates
to a palpation diagnostic
device, which comprises an
optical pressure **sensor**
embedded in a holder;
wherein the optical pressure
sensor is an optical fiber
sensor, or a micro-
fabricated **waveguide** sensor
to be disposed on a finger or



a palm; and the optical pressure sensor is configured to receive an optical signal whose intensity is attenuated when a force is applied on the optical pressure sensors. Therefore, the palpation diagnostic device of the present invention can provide high sensing sensitivity by attenuating the intensity of the optical signal in the optical pressure sensors which a force is applied on, so it can provide precise and immediate information based on quantitative feedback for the users.

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- PN - [CN203385663U](#) U 20140108
- PR - CN201320464041U 20130731
- AP - CN201320464041U 20130731
- DT - I
- PA - UNIV ELECTRONIC SCIENCE & TECH
- TI - MZ (Mach-Zehnder) interference type optical biochemical **sensor** chip **embedded** with FP (Fabry Perot) cavity
- AB - The utility model discloses an MZ (Mach-Zehnder) interference type optical biochemical **sensor** chip **embedded** with an FP (Fabry Perot) cavity, which aims at solving the detection problem of certain biochemical substances. The MZ interference type optical biochemical sensor chip mainly comprises an MZ interference unit, wherein the MZ interference unit comprises two **waveguide** segments, one **waveguide** segment comprises a grating FP cavity, and the MZ interference unit and the grating FP cavity are different in free spectral ranges and are in optical coupled connection. According to the MZ interference type optical biochemical **sensor** chip **embedded** with the FP cavity, disclosed by the utility model, the MZ interference unit and the grating FP cavity, which are different in free spectral ranges, are formed on the single crystal silicon layer on the top, and the interference type optical resonant cavity is formed in the manner that the grating FP optical resonant cavity (grating FP cavity) is connected and embedded in one arm (one **waveguide** segment) of the MZ interference structure (MZ interference unit) and is used for detecting the influence of an outer substance on an optical signal. Compared with other biochemical sensor chips, the MZ interference type optical biochemical sensor chip has the series of characteristics of standard manufacturing process, convenience in integration, excellent sensing performance and the like.

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- PN - [US2013258824](#) A1 20131003
- PNFP - US8547805 B1 20131001
- PR - US201213432245 20120328

AP - US201213432245 20120328

DT - *; Rep

CT - || STSE (B1)
[US8077558](#) B1 20111213 [] (TSUTSUMI TAKESHI [JP], et al);
[US8369191](#) B2 20130205 [] (SHIMAZAWA KOJI [JP]);
[US2010329085](#) A1 20101230 [] (KAWAMORI KEITA [JP], et al);
[US2011216634](#) A1 20110908 [] (CHOU TSUTOMU [JP], et al);
[US2012051196](#) A1 20120301 [] (GROBIS MICHAEL KONRAD [US], et al)

CCI - [G11B5/314](#) ; [G11B5/607](#)

CCA - [G11B2005/0021](#)

CI - G11B5/314 (EP)
 - G11B5/607 (EP)

CA - G11B2005/0021 (EP)

PA - (A1 B1)
 KOMURA EIJI [JP]; SHIMAZAWA KOJI [JP]; CHOU TSUTOMU [JP]; HARA SHINJI [JP];
 TANAKA KOSUKE [JP]; HOSOI RYO [JP]; TDK CORP [JP]

TI - (A1)
 THERMALLY-ASSISTED MAGNETIC RECORDING HEAD HAVING TEMPERATURE **SENSOR**
EMBEDDED ON DIELECTRIC WAVEGUIDE
 - (B1)
 Thermally-assisted magnetic recording head having temperature **sensor embedded**
 on dielectric **waveguide**

AB - (A1 B1)
 A thermal assisted magnetic recording head includes a dielectric **waveguide** that is
 configured to propagate propagation light a metal **waveguide** that is provided facing
 the dielectric **waveguide** and that couples to the propagation light propagating
 through the dielectric **waveguide** in a surface plasmon mode, thereby generating and
 propagating surface plasmon, a near-field light generator that is exposed on an air
 bearing surface facing a magnetic recording medium either at an end part of the
 metal **waveguide** or at a position facing the end part of the metal **waveguide**, and
 that generates near-field light from the surface plasmon, a magnetic pole for
 magnetic recording that is exposed on the air bearing surface, and a temperature
 sensor that is arranged inside the dielectric **waveguide**.

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PN - [US2003100243](#) A1 20030529

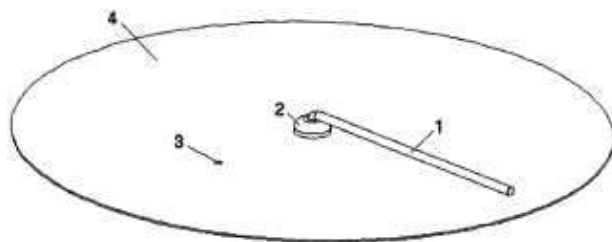
PNFP - US6780085 B2 20040824

PR - US20010991122 20011123

AP - US20010991122 20011123

DT - *; Rep

CT - || STSE (B2)
[US6106662](#) A 20000822 [] (BIBBY THOMAS FREDERICK
 ALLE JR [US], et al);
[US6146242](#) A 20001114 [] (TREUR RANDOLPH E [US], et
 al);
[US6395130](#) B1 20020528 [] (ADAMS JOHN A [US], et al);



	US6485354 B1 20021126 [] (WOLF STEPHAN H [US])
CCI	- B24B37/013 ; B24B37/205 ; B24B49/12
CI	- B24B37/013 (EP) - B24B37/205 (EP) - B24B49/12 (EP)
TI	- (A1 B2) Fiber optical sensor embedded into the polishing pad for in-situ, real-time, monitoring of thin films during the chemical mechanical planarization process
AB	- (A1) An apparatus is disclosed which improves the optical monitoring of semiconductor wafers undergoing chemical mechanical planarization. The apparatus consists of two assemblies. Firstly, a fiber optical wave-guide assembly installed within the polishing pad during the pad's construction. This assembly forms an integrated optical waveguide originating from the center of rotation of the polishing pad and terminating at a location within the wafer track. Secondly, a vacuum hub, tube, and angular encoder assembly, which provides light coupling to the center of rotation of the polishing pad and also provides resolution of the angular position and speed of the polishing pad, polishing table, and optical waveguide . - (B2) An apparatus is disclosed which improves the optical monitoring of semi-conductor wafers undergoing chemical mechanical planarization. The apparatus consists of two assemblies. Firstly, a fiber optical wave-guide assembly

installed within the polishing pad during the pad's construction. This assembly forms an integrated optical **waveguide** originating from the center of rotation of the polishing pad and terminating at a location within the wafer track. Secondly, a vacuum hub, tube, and angular encoder assembly, which provides light coupling to the center of rotation of the polishing pad and also provides resolution of the angular position and speed of the polishing pad, polishing table, and optical **waveguide**.

[SS 51]