

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Kai Xin</td> <td>03/25/2013</td> </tr> <tr> <td>Xuan-Cheng Zhu</td> <td>03/25/2013</td> </tr> </tbody> </table>		Name	Execution Date	Kai Xin	03/25/2013	Xuan-Cheng Zhu	03/25/2013				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>MStar Semiconductor, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>4F-1, No. 26, Tai-Yuan St., Chu Pei</td> </tr> <tr> <td>City:</td> <td>Hsinchu Hsien</td> </tr> <tr> <td>State/Country:</td> <td>TAIWAN</td> </tr> <tr> <td>Postal Code:</td> <td>302</td> </tr> </table>		Name:	MStar Semiconductor, Inc.	Street Address:	4F-1, No. 26, Tai-Yuan St., Chu Pei	City:	Hsinchu Hsien	State/Country:	TAIWAN	Postal Code:	302
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: 7038807487 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 703-639-0151 Email: assignment@wpat.com Correspondent Name: WPAT, PC INTELLECTUAL PROPERTY ATTORNEYS Address Line 1: 8230 Boone Blvd, Suite 405 Address Line 4: Vienna, VIRGINIA 22182</p>											
ATTORNEY DOCKET NUMBER:	67407-313										
NAME OF SUBMITTER:	Justin King										
Signature:	/Justin King/										
Date:	07/25/2013										

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

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Combined Declaration and Assignment for Patent Application
In Chinese/English

美國專利申請聲明以及美國專利轉讓

For the subject matter which is claimed and for which a patent is sought on the invention entitled:
專利申請權利要求的發明名稱如下:

CHANNEL AND NOISE ESTIMATION METHOD AND ASSOCIATED APPARATUS

I hereby declare that: As a below named inventor
我在此宣告：作為下述發明者

The specification of which is attached hereto unless the following box is checked 並將其說明書在此附上，除非以下方格已
打叉:

was filed on 其發明已立案于

as United States Application Number or PCT International Application Number 其美國申請號碼或PCT國際申請號碼為

The above-identified application was made or authorized to be made by me.
以上所提之申請案係由我撰寫或是在我的授權下所撰寫。

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.
我相信我是首創發明者或是首創共同發明者。

I hereby acknowledge that willful false statements made in this statement is punishable under 18 U.S.C. 1001 by fine or/and
imprisonment of not more than five (5) years.
我了解，按照美國法規第十八節第一千零一項，任何蓄意偽造的聲明都可受到罰款和/或五年以下有期徒刑。

ASSIGNMENT

美國專利轉讓

WHEREAS, I(we), the named inventor(s), whose post office address(es) appear(s) below, hereinafter referred to as
ASSIGNOR.
作為下述其郵遞地址的發明者，在此稱轉讓人。

WHEREAS, **MStar Semiconductor, Inc.**
whose post office address is **4F-1, No. 26, Tai-Yuan St., Chu Pei, Hsinchu Hsien, Taiwan 302, R.O.C.**
hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in and to the same in the United
States and its territorial possessions.

晨星半導體股份有限公司位於302新竹縣竹北市台元街26號4樓之1, 在此稱讓受人, 取得此發明在美國與其管轄境內之所有權利。

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, I (we), ASSIGNOR, by these presents do sell, assign and transfer unto said ASSIGNEE, the entire right, title, and interest in and to said INVENTION and application throughout the United States of America, including any and all Letters Patent granted on any division, continuation, continuation-in-part, and reissue of said application for the full term or terms for which the same may be granted, including all priority rights under any international Convention.

根據所收到的相關價值, 轉讓人據此將本發明轉讓於讓受人, 此轉讓包括本發明以及本發明案之所有在美國的相關權利, 包括任何專利有效期內的分案, 續案, 重新核發案, 並包括在國際公約所保障的優先權。

ASSIGNOR further covenants that no assignments, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment.

轉讓人將不會簽署任何與此轉讓書相悖的再轉讓, 販售, 或合同協議。

ALSO, ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent application(s) in the United States for said INVENTION, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said INVENTION, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the INVENTION that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance, litigation and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives;

轉讓人將無條件協助簽署任何法律上所需要與本發明相關的文件, 包括提交申請, 回駁答辯, 年費, 以及任何證明讓受人擁有本發明之文件。在讓受人的要求下, 轉讓人也將無條件協助讓受人, 提供讓受人轉讓人所持有的發明文件資料, 並提供讓受人或是讓受人的法定繼承人在法律上所要求的回駁答辯, 侵權訴訟相關協助。

ALSO, ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such Letters Patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.

轉讓人在此要求美國專利商標局在核發本發明專利時, 根據以上所呈訴讓受人在本發明以及本發明案之所有在美國的相關權利, 核發於讓受人。

Legal Name of the Sole Or First Inventor 第一或尾為一發明者正式名字			
First And Middle Name 發明者名 Kai		Last Name of Inventor 發明者姓 Xin	
Signature 發明者簽字 <i>Kai, Xin</i>		Signature Date (month/day/year) 簽字日期(月/日/年) <i>3/25/2013</i>	
Residence: City 居住之縣市 Hsinchu County	State 省	Citizenship 國籍 CHINA	
Mailing Address 郵寄地址 4F-1, No. 26, Taiyuan St., Zhubei City, Hsinchu County 302, Taiwan (R.O.C.)			
City 縣市 Hsinchu County	State 省	Zip 郵遞區號 302	Country 國家 Taiwan (R.O.C.)

Serial No. _____
 Attorney Docket No. _____
 Ref. No. MST0704-US
 Sundial Ref. No. US09412PA

Legal Name of the Joint Inventor 共同發明者正式名字			
First And Middle Name 發明者名 Xuan-Cheng		Last Name of Inventor 發明者姓 Zhu	
Signature 發明者簽字 <i>Xuan-Cheng, Zhu</i>		Signature Date (month/day/year) 簽字日期(月/日/年) <i>3/25/2013</i>	
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