



**Ausführende:**

Jill Kleiber

Benedikt Völker

Alexander Reuter

Simon Bergedieck

# Forensischer Bericht der M57.biz-Untersuchungen

Aktenzeichen 2  
Version 1.0

Aachen, 30. Juni 2017

# Inhaltsverzeichnis

<b>1. Prolog</b>	<b>2</b>
1.1. Auftrag . . . . .	2
1.2. Beweismittel . . . . .	2
1.3. Beweismittelkette . . . . .	3
1.4. Arbeitsumgebung . . . . .	3
<b>2. Zusammenfassung für Nicht-Techniker</b>	<b>4</b>
2.1. Illegale Daten und Computerverkauf . . . . .	4
2.2. Datenveruntreuung . . . . .	4
2.3. Wirtschaftsspionage . . . . .	4
<b>3. Zusammenfassung für Techniker</b>	<b>5</b>
3.1. Jo . . . . .	5
3.2. Charlie . . . . .	5
3.3. Terry . . . . .	6
3.4. Pat . . . . .	6
<b>A. Details für Techniker</b>	<b>7</b>
A.1. Emails von Pat's PC . . . . .	7
A.2. Daten von Charlie's HDD und USB-Stick . . . . .	22

# 1. Prolog

## 1.1. Auftrag

Nachdem auf einer kürzlich verkauften Workstation, die ehemals im Besitz der Firma M57.biz war, illegale Daten gefunden wurden, soll der Besitzer der Daten ermittelt werden. Ebenfalls ist herauszufinden, wie es zum Verkauf des Geräts kam, ob es sich dabei um Diebstahl handelt und wer daran beteiligt war. Da das Gerät ursprünglich die Workstation des Mitarbeiters Jo Smith war, wird die Hypothese aufgestellt, dass dieser der Verantwortliche im oben beschriebenen Sachverhalt ist.

Bei den Untersuchungen fielen weitere Sachverhalte auf, die darüber hinaus untersucht werden sollten. Zum einen war dies, dass Firmengeheimnisse veruntreut wurden, zum anderen, dass der CEO Pat MacGoo von einem der Mitarbeitern ausspioniert wurde.

In Bezug auf die Veruntreuung sollte der Verantwortliche gefunden werden, welche Daten weitergegeben wurden und wer die Daten erhalten hat.

Bei der Spionage soll ermittelt werden von wem und aus welchem Grund sie durchgeführt wird sowie welche Methoden angewandt wurden.

## 1.2. Beweismittel

Als Beweismittel wurden jeweils vier Festplattenimages, USB-Stick-Images und RAM-Images erhalten.

Tabelle 1.1.: Images

Nr.	Image	Größe in GB	MD5-Hash
1	charlie_harddrive	10,2	3017c4188553d7423cd6646a7ff1c1a9
2	jo_harddrive	15,4	872e38f83628f2c3a203457c90e57fdb
3	pat_harddrive	13,0	8f39599fc63bdda285158ea20ee3d567
4	terry_harddrive	41,1	f945f4e23fe82868547cada9868c48c0
5	charlie-2009-12-11	2,1	38067CC457546B3156975D9A52D4229F
6	jo-2009-12-11	1,1	E929219719211F51267C5DFB5406A5AB
7	pat-2009-12-11	0,5348	CE9D8A9979F2BADE5228393B8AC1E3FD
8	terry-2009-12-11	2,1	6B43EB293D85BDD6AD5EF2B2F84F8584
9	charlie_work_usbdrive	1,1	f7f625f56b0337d4d23e423f2ead119e
10	jo_private_usbdrive	1,0	b1ea0a9edae0b3558bb43566ef20e90d
11	jo_work_usbdrive	0,131	59a3620fdd4210b6e909ada29a340877
12	terry_work_usbrive	2,1	9d84f913f3d056e45bd82ed78aa9ba6f

### **1.3. Beweismittelkette**

Die Beweismittel wurden am 20. Juni 2017 um 12:26 im Raum E124 der FH Aachen Eupenerstraße von Chief Inspektor Benedikt Paffen an Ermittler Benedikt Völker ausgehändigt. Bezeugt wurde diese Übergabe von Jill Kleiber.

Im Anschluss wurden die Beweismittel vervielfältigt und zur Unterstützung bei den Untersuchungen an die weiteren Teammitglieder übergeben. Eine Vervielfältigung aller Beweismittel erhielt Alexander Reuter am 20. Juni 2017. Ebenfalls an diesem Tag wurden Simon Bergedieck eine Kopie der Beweismittel 1,5 und 9 übergeben. Jill Kleiber erhielt ein Duplikat aller Beweismittel am 23. Juni 2016. Die Originalbeweise verblieben bei Benedikt Völker, der sie so verwahrte, dass eine Manipulation der Daten ausgeschlossen ist. Die Integrität der Beweismittel wird durch die Bereitstellung und regelmäßige Überprüfung der Hash-Werte gewährleistet.

### **1.4. Arbeitsumgebung**

Alle Ermittler nutzten eine Windows 10 64 Bit Version. Als Analyseprogramme wurden Autopsy Version 4.4.0 mit Sleuth Kit Version 4.4.1 und Volatility Version 2.6 verwendet.

Die Untersuchungen fanden im Zeitraum zwischen dem 20. Juni 2017 und dem 30. Juni 2017 in dafür geeigneten Räumlichkeiten des forensischen Trakts der FH Aachen Eupenerstraße (Besucherraum der Mensa) statt.

## **2. Zusammenfassung für Nicht-Techniker**

### **2.1. Illegale Daten und Computerverkauf**

- einschlägige Daten auf Jos privatem USB-Stick
- identische Daten auf Jos Festplatte (als gelöschte Daten)
- Jos Computer musste ausgetauscht werden
- Terry hat Kontaktdaten von Aaron Green (Käuferin der Workstation) im Handy

### **2.2. Datenveruntreuung**

- Charlie hat Patentforschung über Time machine von Nitroba als Steganographie-Bild per E-Mail an jamie@project2400.com (Project 2400 größter Konkurrent von Nitroba) verschickt
- zum Auslesen wird Steganographieprogramm Invisible Secrets gebraucht (Passwort: nitro)
- Charlie hat andy@swaxpat.com erpresst mit Informationen, die dessen Immortality-Patent ungültig lassen werden

### **2.3. Wirtschaftsspionage**

- Programm winvnc4 dient zum abhören
- Terry verfügt über Programm (auf USB-Stick)
- Programm wurde auf Pats Computer ausgeführt (Beweis im RAM)
- Terry hat Benutzerprofil auf Pats Computer

## 3. Zusammenfassung für Techniker

4. Zusammenfassung für Techniker Maximal 10 Seiten, übersichtlich gegliedert nach Schritten in der Ermittlung Technikersprache, wesentliche Spuren und Fundorte dokumentieren Bei Details auf Anhang verweisen

Die Beweismittel wurden personenweise auf die Ermittler aufgeteilt und mittels Autopsy, Sleuth Kit und Volatility gründlich untersucht. Während der Ermittlungen wurde bei allen Images nach Beweisen bezüglich aller Fälle gesucht.

### 3.1. Jo

Zunächst wurde der private USB-Stick untersucht, da dort die Besitzverhältnisse der Daten klar sind. Auf besagtem Beweisstück waren die gesuchten illegalen Daten in den Ordnern *HighQuality* und *Videos*. Bei der Untersuchung des Festplattenimages konnten die identischen Dateien in den *carved Files* gefunden werden. Die Identität wurde mit Hashwerten überprüft, welche für die korrespondierenden Dateien erfolgreich validiert werden konnten.

Darüber hinaus befanden sich auf dem Work USB-Stick im Ordner *\_TiggerTheCat* ebenfalls die gelöschten illegalen Dateien.

Eine Überprüfung der Timestamps ergab, dass die Dateien am 18.11.2009 auf den privaten USB-Stick kopiert wurden. Jo's Workstation wurde am 20.11.2009 ausgetauscht (s. Abschnitt A.1.1 auf Seite 7). Es kann daraus geschlussfolgert werden, dass die Dateien bereits vor dem Austausch in Jo's Besitz waren und die Dateien auf der verkauften Workstation dementsprechend vermutlich von ihm stammen.

### 3.2. Charlie

Die forensischen Untersuchungen von Charlie's Images ergaben einige Dateien, die beweisen, dass er sowohl in die Veruntreuung von Daten als auch in Erpressung verwickelt war. Die Daten wurden in Steganographie-Bilder versteckt und per E-Mail versandt. Die belastenden E-Mails und Bilder konnten sowohl auf der HDD im Ordner *Emails* als auch auf dem USB-Stick gefunden werden.

Bei der Veruntreuung der Daten handelte es sich um die Weitergabe von Ergebnissen bei einer Patentsuche für Nitroba im Projekt Time machines. Die veruntreuten Daten konnten unter *mydocuments/nitrobe* gefunden werden. Zum Einbetten in das Bild *Charlie\_2009-12-03\_1216\_Sent\_astronaut1.jpg* (Abschnitt A.2.4 auf Seite 23) wurde das Steganographieprogramm Invisible Secrets gebraucht mit dem Passwort nitro. Der

Empfänger der Daten war Jamie von project2400, welches die größten Konkurrenten von Nitroba sind. Charlie erhielt für diese Veruntreuung 50.000 Dollar. Die weiteren Beweise können in Anhang A.2 File 1 bis 6 eingesehen werden.

Die Erpressung bezog sich auf das Immortality Projekt von swexpert. Der Empfänger, Andy, der E-Mails wird auf 100.000 Dollar erpresst, da Charlie sonst Daten veröffentlicht, die das aktuelle Patent für Immortality ungültig lassen wird. Die Dateien werden als zip versendet und das zugehörige Passwort erneut als Steganographie-Bild (Abschnitt A.2.10 auf Seite 28). Die Inhalte der zip-Datei konnten auch unverschlüsselt im Ordner *Immortality* auf dem USB-Stick gefunden werden (im Anhang A.2 File 8).

### 3.3. Terry

Auf Terry's USB-Stick konnten eine größere Ansammlung an Bildern gefunden werden, welche Screenshots vom Ausspionieren von Pat's Workstation zeigen. Des Weiteren konnte auf dem USB-Stick die Datei *vnc-4\_1\_3-x86\_win32.exe* gefunden werden. Eine Internetrecherche ergab, dass das Programm *winvnc4* zum abhören und ausspionieren von Computern dient.

Auf seiner HDD konnte unter dem Pfad */Users/terry/Documents/Downloads/comcast\_indictment.pdf* ein Gerichtsbeschluss über einen Wirtschaftsspionage-Fall gefunden werden, was darauf schließen lässt, dass er entweder auch in diesem Fall beteiligt war, oder sich über mögliche Konsequenzen informieren wollte.

Darüber hinaus befanden sich Kontaktdaten von Terry's Handy auf seiner HDD. Diese zeigen, dass er die Kontaktdaten von Aaron Green, der Käuferin von Jo's alter Workstation abgespeichert hat.

### 3.4. Pat

Bei Pat konnte im RAM-Image der Prozess *winvnc4.exe* mit der ProzessID 756 am 11.12.2009 gefunden werden. Außerdem besitzt Terry ein Benutzerprofil auf Pat's Festplatte, allerdings nicht auf den Festplatten der anderen beiden Mitarbeiter. Diese beiden Tatsachen lassen darauf schließen, dass Terry Pat ausspioniert hat.

Auch die E-Mails im Anhang A.1 FILE 14 bis 16 in denen Pat über einen langsamen Computer und ein fehlerhaftes Antiviren-Programm klagt und Terry ohne genauere Details sofort die Ursache kennt, deuten auf diesen Tatbestand hin.

Zusätzlich zu den Kontaktdaten auf Terry's Festplatte existiert eine E-Mail an Pat (Abschnitt ?? auf Seite ??), in der Terry erklärt, dass er sich um die Workstation kümmern wird, legt es den Schluss nahe, dass Terry für den Verkauf der Workstation verantwortlich ist.

## A. Details für Techniker

5. Details für Techniker (meist als Anhang) Logdateien, Bildschirmfotos, Listings, Terminalsessions, ... Jeweils durchnummeriert, damit man darauf Bezug nehmen kann in vorherigen Teilen des Berichts Beliebig lang

### A.1. Emails von Pat's PC

#### A.1.1. FILE 1:

Name           wbk15.tmp  
Pfad           /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk15.tmp  
Zeitstempel   2009-11-23 17:56:33 MEZ

Pat,

I understand. Don't worry – I'll take care of everything.

Terry

----- Original Message -----

From: Pat McGoo pat@m57.biz

To: terry t93940@gmail.com; jo@m57.biz

Sent: Friday, November 20, 2009 2:40 PM

Subject: Re: Equipment Disposal

Jo,

yes, I would be concerned about that too, thanks for thinking about that.

Terry – what did you /are you going to/ do with Jo's computer?

We need to make sure it is properly erased ! Thank you.

Pat

----- Original Message -----

From: jo@m57.biz

To: Pat McGoo pat@m57.biz

Sent: Friday, November 20, 2009 2:29 PM

Subject: Equipment Disposal



Pat,

My computer had to be swapped out today. I just want to make sure it is properly disposed of. There could be company information on there that we don't want to share with the rest of the world. Right?

– Jo

### A.1.2. FILE 2:

Name           wbk29.tmp  
Pfad           /img\_pat\_hddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk29.tmp  
Zeitstempel   2009-12-10 23:24:30 MEZ

Pat,

You are correct.

Terry

----- Original Message -----

From: Pat McGoo

To: terry@m57.biz

Cc: jo@m57.biz

Sent: Thursday, December 10, 2009 2:11 PM

Subject: Computer Serial Number

Terry,

is this serial number from that computer Jo used to have? C1111

Pat

### A.1.3. FILE 3:

Name           wbk4.tmp  
Pfad           /img\_pat\_hddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk4.tmp  
Zeitstempel   2009-12-11 17:47:28 MEZ

Pat,

There ya go....let me know if you need anything else.

– Terry

----- Original Message -----

From: Pat McGoo

To: Terry Johnson

Sent: Thursday, December 10, 2009 2:29 PM

Subject: Re: Computer Serial Number

Terry,

I'd like to see all the serial numbers on the equipment inventory you did. Just send me the whole inventory.

Thanks

Pat

----- Original Message -----

From: Terry Johnson

To: Pat McGoo

Sent: Thursday, December 10, 2009 2:12 PM

Subject: Re: Computer Serial Number

Pat,

You are correct.

Terry

----- Original Message -----

From: Pat McGoo

To: terry@m57.biz

Cc: jo@m57.biz

Sent: Thursday, December 10, 2009 2:11 PM

Subject: Computer Serial Number

Terry,

is this serial number from that computer Jo used to have? C1111

Pat

#### A.1.4. FILE 4:

Name wbk14.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk14.tmp  
Zeitstempel 2009-11-17 19:30:37 MEZ

Dear Pat,

Yes, we are very interested in using your prior art investigation services. Our R&D department is currently applying for patents in two key areas that we are counting on to gain market share over our major competitor, project2400.com. I am counting on you and your firm to keep these research areas in strict confidentiality. We wouldn't want project2400 to know about our research interests.

We will hire you to do prior art searches on these two areas:

- \* Time machines
- \* Teleporters

Please send me a quote for these two investigations.

Regards,

Alex

CEO – Nitroba.com

On Nov 16, 2009, at 2:49 PM, Pat McGoo wrote:

Alex,

I enjoyed talking with you at the patent conference in San Francisco last week. I remember that you said that you would be interested in our prior art investigation services.

If you are still interested in our services, then I can fax you over a service agreement right away. I hope to hear from you soon. Please do not hesitate to give me a call or email if you have any questions, concerns, or comments.

Regards,

Pat McGoo

CEO, M57.biz

pat@m57.biz

831-555-1234

### A.1.5. FILE 5:

Name           wbk27.tmp  
Pfad           /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk27.tmp  
Zeitstempel   2009-11-19 20:30:57 MEZ

I'll drop by in a little bit. Thanks.

– Jo

----- Original Message -----

From: Pat McGoo  
To: Jo Smith  
Sent: Wednesday, November 18, 2009 2:06 PM  
Subject: Re: ASSIGNMENT OF NITROBA ACCOUNT

If you have time this afternoon let's get together on this – I have a few ideas that might help out.

----- Original Message -----

From: Jo Smith  
To: Pat McGoo  
Sent: Tuesday, November 17, 2009 10:49 AM  
Subject: Re: ASSIGNMENT OF NITROBA ACCOUNT

I am on it boss.

Jo

----- Original Message -----

From: Pat McGoo  
To: jo@m57.biz ; charlie@m57.biz  
Sent: Tuesday, November 17, 2009 10:33 AM  
Subject: ASSIGNMENT OF NITROBA ACCOUNT

Jo, Charlie:

We have our first contract ! Nitroba wants us to do a prior art investigation in two key areas. Jo, you will be responsible for the teleporter patent search. Charlie, I want you to take the time machine patent search. This is our first real job, so let's make sure we do some quality research. Our reputation will depend on the time and effort that we put into this contract and on Nitroba's satisfaction with our results. Come by my office and we'll talk

details.

Pat

### A.1.6. FILE 6:

Name           wbk1B.tmp  
Pfad           /img\_pat\_hddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk1B.tmp  
Zeitstempel   2009-12-10 19:00:49 MEZ

Pat,

Yes, we do want to utilize your prior art services. We are seeking information on any prior art dealing with quantum cryptography. You have my permission to start a search on this. I'll send over my accountant to go over the details of billing.

Cheers,

Kris

On Nov 16, 2009, at 2:28 PM, Pat McGoo wrote:

Kris,

I haven't heard from you in a while after our phone call last month. Are you still interested in our prior art investigation services?

I hope to hear from you soon. Please do not hesitate to give me a call or email if you have any questions, concerns, or comments.

Regards,

Pat McGoo

CEO, M57.biz

pat@m57.biz

831-555-1234

### A.1.7. FILE 7:

Name wbk19.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk19.tmp  
Zeitstempel 2009-11-23 18:07:49 MEZ

Pat,

I need a larger hard drive since my Vista installation is taking up too much space. Should I purchase the drive and the company can re-imburse me later? Or are you going to purchase the drive?

Thanks,

Terry

### A.1.8. FILE 8:

Name wbk17.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk17.tmp  
Zeitstempel 2009-11-20 19:46:57 MEZ

Pat,

It costs more when you need a new hard drive immediatley. Here's hoping to this drive being good.

Thanks,

Terry

IT Administrator, M57.biz

terry@m57.biz

----- Original Message -----

From: Pat McGoo

To: Terry Johnson

Sent: Thursday, November 19, 2009 1:04 PM

Subject: Re: Hard Drive Receipt

Terry,

It seems that \$300 is a little expensive for a 40GB hard drive. Oh well, at least work is getting done.

Thanks,

Pat  
CEO, M57.biz  
pat@m57.biz

----- Original Message -----

From: Terry Johnson  
To: Pat McGoo  
Sent: Thursday, November 19, 2009 12:58 PM  
Subject: Hard Drive Receipt

Pat,

Please see the attached image/document for the hard drive receipt.

Thanks,

Terry  
IT Administrator, M57.biz  
terry@m57.biz

### A.1.9. FILE 9:

Name	wbk13.tmp
Pfad	/img_pat_harddrive.001/Documents and Settings/Pat/Local Settings/ Temporary Internet Files/Content.IE5/6NU83K2N/wbk13.tmp
Zeitstempel	2009-12-10 18:58:34 MEZ

Terry,  
make a list and prioritize them. But right now we don't have the  
money in the budget for all of this.

Thanks  
Pat

----- Original Message -----

From: Terry Johnson  
To: Pat McGoo  
Sent: Wednesday, December 09, 2009 9:51 AM  
Subject: Re: Computer Equipment

Pat,

We are in need of some additional equipment. Below is a list of some  
equipment that I think we need to support our day-to-day operations as  
well as expand our operations in to the future.

– Wireless Router (  
<http://www.google.com/products?hl=en&source=hp&q=wireless%20router&um=1&ie=UTF-8&sa=&as=N&tab=wf>  
 )  
 – Monitors (<http://www.google.com/products?q=computer+monitor&hl=en&aq=f>  
 )  
 – Laptops (<http://www.google.com/products?q=laptop&hl=en&aq=f>)  
 – Backup Hard Drives (  
<http://www.google.com/products?q=backup+hard+drives&hl=en&aq=f>)  
 – Servers (<http://www.google.com/products?q=server&hl=en&aq=f>)

Thanks,  
 Terry

----- Original Message -----

From: Pat McGoo  
 To: terry@m57.biz  
 Sent: Wednesday, December 09, 2009 9:10 AM  
 Subject: Computer Equipment

Terry,

based on our conversation the other day, are we in fact in need of  
 some more equipment to support operations? If so, what kind of things  
 do we need?

Thanks  
 Pat

## A.1.10. FILE 10:

Name            wbk24.tmp  
 Pfad            /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                  Temporary Internet Files/Content.IE5/6NU83K2N/wbk24.tmp  
 Zeitstempel   2009-12-09 18:07:20 MEZ

Dear Sir,

may I introduce myself. I am Mr. Jasper McRachelvick, esquire, of the  
 commonwealth of the nederlanden. I am experiencing a newly once and  
 lifetime chance of renewing contracts for tar-paving in the country. The  
 leader of the business, a Mr. M. Zimmerstern, has agreed to contract for  
 very good prices if my company is able to produce a downpayment on new  
 equipment. This project is expected to return some twelve hundred percent  
 on all investments ! I would like to offer you the opportunity to invest  
 in this endeavor. Your contribution of 25,000 U.S. dollars will ensure a  
 return, with 6 months, of your original investment plus 25,000 each quarter  
 after dat for 12. It is superb great deal !! Please send me your return



informatoin, and my secretary will be contacting you very soonest.

Best regards,  
Jasper McRachelvick  
Business leader

### A.1.11. FILE 11:

Name           wbk30.tmp  
Pfad            /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                  Temporary Internet Files/Content.IE5/6NU83K2N/wbk30.tmp  
Zeitstempel   2009-12-09 20:02:53 MEZ

Possibly...I don't have the finances to cover that amount. Maybe you should check to make sure they are part of the Better Business Bureau.

Terry

----- Original Message -----

From: Pat McGoo  
To: terry@m57.biz  
Sent: Thursday, December 03, 2009 9:46 AM  
Subject: Fw: GGworld For You

Terry,

I got this email today – it looks like a really good deal – what do you think? Perhaps we could all go in together on this, and make some money to fund more inventions !

This is exciting.

Pat

----- Original Message -----

From: Jasper McRachelvick  
To: pat@m57.biz  
Sent: Thursday, December 03, 2009 9:42 AM  
Subject: GGworld For You

Dear Sir,

may I intorduce miself. I am Mr. Jasper McRachelvick, esquire, of the commonwealth of the nederlanden. I am experiencing a newly once and lifetime chance of renewing contracts for tar–paving in the country. The leader of the business, a Mr. M. Zimmerstern, has agreed to contract for very good prices if my company is able to produce a downpayment on new equipment. This project is expected to return some twelve hundred

percent on all investments ! I would like to offer you the opportunity to invest in this endeavor. Your contribution of 25,000 U.S. dollars will ensure a return, with 6 months, of your original investment plus 25,000 each quarter after dat for 12. It is superb great deal !! Please send me your return informatoin, and my secretary will be contacting you very soonest.

Best regards,  
Jasper McRachelvick  
Business leader

### A.1.12. FILE 12:

Name           wbk41.tmp  
Pfad           /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk41.tmp  
Zeitstempel   2009-11-17 23:35:13 MEZ

Pat,

The network as well as the company's computers are operating at tip-top shape. The following are the base-line software components installed on each computer:

- Mozilla Firefox
- AVG Anti-Virus
- Microsoft Outlook
- OpenOffice

In addition to installing the above software, I went ahead and updated all of the computers with the latest security patches. Please let me know if you would like me to install/update anything else.

Thanks,

Terry  
IT Administrator, M57.biz  
terry@m57.biz  
831-233-2883

### A.1.13. FILE 13:

Everyone,

I setup and installed the new printer today on the network. It should be running smoothly. If you are having any problems with the printer, then shoot me an email.

Name wbk3E.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk3E.tmp  
Zeitstempel 2009-12-09 20:04:45 MEZ

Thanks,

Terry  
IT Administrator, M57.biz  
terry@m57.biz

#### A.1.14. FILE 14:

Name wbkD.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbkD.tmp  
Zeitstempel 2009-12-10 18:56:21 MEZ

Pat,

I'll jump over to your desk after my break.

Thanks,

Terry

----- Original Message -----

From: Pat McGoo

To: Terry Johnson

Sent: Tuesday, December 01, 2009 8:54 AM

Subject: Re: Printer Installed / computer help

That's great Terry, thanks.

On another note, my computer seems to be running pretty slowly lately.  
Appreciate if you can come have a look when you get a chance.

Pat

----- Original Message -----

From: Terry Johnson

To: Pat McGoo ; Jo Smith ; Charlie

Sent: Monday, November 30, 2009 9:49 AM

Subject: Printer Installed

Everyone,

I setup and installed the new printer today on the network. It should be running smoothly. If you are having any problems with the printer, then shoot me an email.

Thanks,

Terry  
IT Administrator, M57.biz  
terry@m57.biz

### A.1.15. FILE 15:

Name           wbk2F.tmp  
Pfad           /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
                Temporary Internet Files/Content.IE5/6NU83K2N/wbk2F.tmp  
Zeitstempel   2009-12-07 18:32:13 MEZ

Thanks for stopping by...it is running quite a bit faster.

– Pat

----- Original Message -----

From: Terry Johnson  
To: Pat McGoo  
Sent: Thursday, December 03, 2009 9:54 AM  
Subject: Re: Slow computer

I'll stop by today...I know what the problem is.

– Terry

----- Original Message -----

From: Pat McGoo  
To: terry@m57.biz  
Sent: Thursday, December 03, 2009 9:22 AM  
Subject: Slow computer

Terry,

my computer seems to be getting even slower... anything we can do?

Thanks  
Pat

### A.1.16. FILE 16:

Name wbk23.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk23.tmp  
Zeitstempel 2009-12-07 17:59:33 MEZ

Pat & Everyone Else,

I need to change a setting on the anti-virus software. I will do that on Monday. You should all be safe and secure till Tuesday.

Thanks,  
Terry

----- Original Message -----

From: Pat McGoo  
To: terry@m57.biz  
Sent: Friday, December 04, 2009 9:14 AM  
Subject: Anti-virus

Terry,

is the anti-virus working? I think there is something wrong with mine...

Pat

### A.1.17. FILE 17:

Name wbk39.tmp  
Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk39.tmp  
Zeitstempel 2009-11-20 19:58:23 MEZ

Thanks Terry. It works nicely.

----- Original Message -----

From: Terry Johnson  
To: Pat McGoo  
Sent: Thursday, November 19, 2009 12:02 PM  
Subject: Re: pdf viewer

I'll stop by after lunch to put Adobe Reader on your computer.

– Terry

----- Original Message -----

From: Pat McGoo

To: Terry Johnson

Sent: Wednesday, November 18, 2009 2:12 PM

Subject: pdf viewer

Terry, at some point can I get adobe on my computer?

----- Original Message -----

From: Terry Johnson

To: Pat McGoo

Sent: Wednesday, November 18, 2009 10:16 AM

Subject: Appt.

Pat,

Is it alright for me to leave for a dentist appointment I have for lunch?

Thanks,

Terry

### A.1.18. FILE 18:

Name wbk31.tmp

Pfad /img\_pat\_harddrive.001/Documents and Settings/Pat/Local Settings/  
Temporary Internet Files/Content.IE5/6NU83K2N/wbk31.tmp

Zeitstempel 2009-11-17 21:55:43 MEZ

Pat,

I have loaded all of the computers with the background that you wanted.  
I'll stop by later this afternoon to give back your thumbdrive.

Thanks,  
Terry

Terry,

this morning stop by my office – I have a company logo I created on my  
thumb drive. I'd like it installed as a background on all of the  
computers.

Thanks,  
Pat

## A.2. Daten von Charlie's HDD und USB-Stick

Die folgenden E-Mails und Bilder waren sowohl auf der Festplatte unter *emails*, als auch auf dem USB-Stick direkt abgespeichert. Die Inhalte der zip-Datei befanden sich auf dem USB-Stick im Ordner *Immortality* und die Word-Datei bezüglich der Arbeit für Nitroba auf der Festplatte unter *mydocuments/nitroba*.

### A.2.1. FILE 1:

Subject:  
Interested?  
From:  
Charlie <charlie@m57.biz>  
Date:  
Wed, 02 Dec 2009 13:25:45 -0800  
To:  
jamie@project2400.com

J,

I have something that you'll definitely be interested in. It concerns your competitor. I'm doing a  
 ↳prior art search for them. Want to know what I've found? You know ↳  
 ↳my price. I'll send you the goods after I see half in my account. Make ↳  
 ↳sure you delete this email.

C

### A.2.2. FILE 2:

Subject:  
Re: Interested?  
From:  
jamie@project2400.com  
Date:  
Thu, 3 Dec 2009 09:51:33 -0800  
To:  
"Charlie" <charlie@m57.biz>

C,

We'll give you 50 large if it's good. I'll put in 10 up front, you'll get the rest when we see the goods.

J

> > J,  
> >

> > I have something that you'll definitely be interested in. It concerns  
> > your competitor. I'm doing a prior art search for them. Want to know  
> > what I've found? You know my price. I'll send you the goods after I  
> > see half in my account. Make sure you delete this email.  
> >  
> > C  
> >  
> >  
> >

### A.2.3. FILE 3:

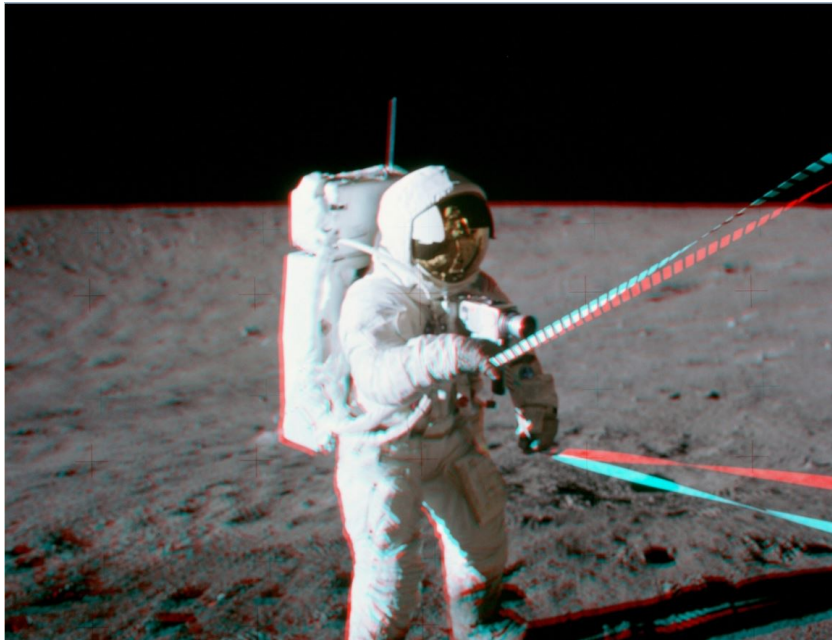
From:  
Charlie <charlie@m57.biz>  
Date:  
Thu, 03 Dec 2009 12:16:52 -0800  
To:  
jamie@project2400.com

J,

Nice working with you. Here's the file. Instructions for opening to follow when I see another deposit ↵  
↵ in my acct.

C

### A.2.4. FILE 4:





**A.2.5. FILE 5:**

Time Machine Prior Art:

Pub. No.:WO/2009/056125 International Application No.:PCT/DE2008/001787 Publication Date ↩  
 ↩:07.05.2009 International Filing Date:28.10.2008

Pub. No.: WO/2008/143237 International Application No.: PCT/JP2008/059191  
 Publication Date: 27.11.2008 International Filing Date: 20.05.2008

Pub. No.:WO/2008/094611 International Application No.:PCT/US2008/001241 Publication Date ↩  
 ↩:07.08.2008 International Filing Date:30.01.2008

PriorityData:

11/700,015 31.01.2007 US

Title: SIMULATION SYSTEM IMPLEMENTING REAL-TIME MACHINE DATA

**A.2.6. FILE 6:**

Subject:

Instructions

From:

Charlie <charlie@m57.biz>

Date:

Fri, 04 Dec 2009 13:06:23 -0800

To:

jamie@project2400.com

J,

Got the deposit. The password to get the info is nitro. Use the steg program we talked about. And ↩  
 ↩don't forget to delete these emails.

C

**A.2.7. FILE 7:**

Subject:

I Found Something

From:

Charlie <charlie@m57.biz>

Date:

Fri, 04 Dec 2009 09:41:47 -0800

To:

andy@swexpert.com

Andy,


Lucky for me, I just happened to stumble across this. I found a prior patent that will definitely  
→ invalidate your current immortality patent. You should have used my →  
→ boss's prior art services, but, oh well, I'll just use your negligence to →  
→ benefit me. I want 100k or I'll release this publicly. I don't need to tell →  
→ you how much this will hurt your business if I go public with this. →  
→ Don't involve the cops or this information will go public. See the →  
→ attachment for details on what I found. I'll be in touch with my bank →  
→ acct number. The password for the zip file will be hidden in the next →  
→ picture I send you.

C

## A.2.8. FILE 8:

<b>United States Patent</b> [19]		[11] <b>Patent Number:</b> <b>5,026,637</b>
<b>Soule et al.</b>		[45] <b>Date of Patent:</b> <b>Jun. 25, 1991</b>
[54] <b>IMMORTAL HUMAN MAMMARY EPITHELIAL CELL LINES</b>		Growth in Culture", Charles M. McGrath and Herbert D. Soule, pp. 653-662.
[76] <b>Inventors:</b> <b>Herbert Soule</b> , 6344 Jonathan, Dearborn, Mich. 48126; <b>Charles M. McGrath</b> , 6669 Beach, Troy, Mich. 48098		In Vitro Cellular & Developmental Biology, vol. 33, No. 1, Jan. 1986, "A Simplified Method for Passage and Long-Term Growth of Human Mammary Epithelial Cells", Herbert D. Soule and Charles M. McGrath, pp. 6-12.
[21] <b>Appl. No.:</b> <b>317,610</b>		Proceedings of AACR, vol. 29, Mar. 1988, #1780, p. 448.
[22] <b>Filed:</b> <b>Feb. 28, 1989</b> (Under 37 CFR 1.47)		<i>Primary Examiner</i> —Esther L. Kepplinger <i>Assistant Examiner</i> —Toni R. Scheiner <i>Attorney, Agent, or Firm</i> —Robert L. Kelly; Dykema Gossett
[51] <b>Int. Cl.</b> <sup>3</sup> ..... <b>C12Q 1/02; C12Q 1/18; C12N 5/06</b>		[57] <b>ABSTRACT</b>
[52] <b>U.S. Cl.</b> ..... <b>435/29; 435/32; 435/172.1; 435/240.1; 435/240.2; 436/63; 436/813</b>		Immortalized human epithelial cell sublines are provided. The novel cell lines do not undergo terminal differentiation and senescence upon exposure to high calcium concentrations. The novel cells exhibit positive reactivity with milk-fat globule membrane antigen and cytokeratin anti-serum. The cells are non-tumorigenic in athymic mice, and exhibit both three-dimensional growth in collagen and dome formation in confluent cultures. The cell sublines demonstrate growth control by hormones and growth factors. The novel cell sublines are useful in evaluating the capacity of preselected agents to bring about a change in epithelial cell growth and in the production of proteins.
[58] <b>Field of Search</b> ..... <b>435/29, 23, 7, 320, 435/6, 252.8, 219, 32, 172.1, 240.1, 240.2; 436/63, 813; 536/27; 935/9; 424/85.2, 85.1, 85.8, 85.91, 1.1; 514/317, 428, 648; 530/14, 395, 415, 829</b>		
[56] <b>References Cited</b> <b>PUBLICATIONS</b>		
Jones et al., Breast Cancer Research Group and Pathology Dept., Michigan Cancer Foundation, Detroit, Mich. 48201, Proceedings of AACR, vol. 29, (Mar. 1988).		
In Vitro, vol. 20, No. 8, Aug. 1984, "Calcium Regulation of Normal Human Mammary Epithelial Cell		

3 Claims, 3 Drawing Sheets

  
 US006982168B1

(12) **United States Patent**  
**Topalian et al.**

(10) **Patent No.: US 6,982,168 B1**  
(45) **Date of Patent: Jan. 3, 2006**

---

(54) **IMMORTAL HUMAN PROSTATE EPITHELIAL CELL LINES AND CLONES AND THEIR APPLICATIONS IN THE RESEARCH AND THERAPY OF PROSTATE CANCER**

(75) Inventors: **Suzanne L. Topalian**, Brookeville, MD (US); **W. Marston Linehan**, Rockville, MD (US); **Robert K. Bright**, Portland, OR (US); **Cathy D. Vocke**, Germantown, MD (US)

(73) Assignee: **The United States of America as represented by the Department of Health and Human Services**, Washington, DC (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **08/913,770**

(22) PCT Filed: **Jan. 30, 1997**

(86) PCT No.: **PCT/US97/01430**  
§ 371 (c)(1),  
(2), (4) Date: **Sep. 22, 1997**

(87) PCT Pub. No.: **WO97/28255**  
PCT Pub. Date: **Aug. 7, 1997**

**Related U.S. Application Data**

(60) Provisional application No. 60/011,042, filed on Feb. 2, 1996.

(51) **Int. Cl.**  
**C12N 15/85** (2006.01)

(52) **U.S. Cl.** ..... **435/325; 435/366; 435/371; 435/384; 435/385; 435/386**

(58) **Field of Classification Search** ..... 424/184.1, 424/277.1, 93.7; 435/7.23, 325, 366, 378  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,026,637 A	6/1991 Soule et al. ....	435/29
5,376,542 A	12/1994 Schlegel .....	435/172.2
5,436,152 A	7/1995 Soule et al. ....	435/240.2
5,443,954 A	8/1995 Reddel et al. ....	435/7.21
5,462,870 A	10/1995 Chopra .....	435/240.2
5,576,206 A	11/1996 Schlegel .....	435/240.2
5,716,830 A	2/1998 Webber et al. ....	435/6
5,824,488 A	* 10/1998 Webber et al. ....	435/7.23

**FOREIGN PATENT DOCUMENTS**

WO	WO 92/16645	10/1992
WO	WO 95/29990	11/1995
WO	WO 95/29994	11/1995

**OTHER PUBLICATIONS**

Chiarello, E., *Oncogene* 16: 541-545, 1998.\*  
 Kelemen. *Genes Chromosomes Cancer* 11:195-198, 1994.\*  
 Drexler. *Leukemia & Lymphoma* 9:1-25, 1993.\*  
 Embleton, *Immunol. Ser.* 23:181-207, 1984.\*  
 Heu, In: *Tissue Culture Meth & Applications*, Kruse & Patterson, Eds., p. 764, 1973.\*  
 Mustafa O. *Int'l. J. Oncol.* 8(5):883-888, 1996.\*  
 ATCC Catalogue of Cell Lines & Hybridomas, 6th edition, pp. 145 and 222, 1988.\*  
 Bernardino et al. "Characterization of Chromosome changes in two human prostatic carcinoma cell lines (PC-3 and DU 145) using chromosome painting and comparative genomic hybridization" *Cancer Genet. Cytogenet.* vol. 96, pp. 123-128, 1997.\*  
 Freshney, *Culture of Animal Cells, A manual of basic technique* chapter 13, p. 130, 1983.\*  
 Smith, R. T. "Cancer and the immune system" *Clinical Immunology*, vol. 41 No. 4, pp. 841-850, Aug. 1994.\*  
 McInerney J. M et al. *Gene Therapy* 7(8): 653-63, 2000.\*  
 Parda et al., "Neoplastic Transformation of a Human Prostate Epithelial Cell Line by the v-Ki-ras Oncogene", *The Prostate* 23:91-98 (1993).  
 Hayward et al., "Establishment and Characterization of an Immortalized But Non-Transformed Human Prostate Epithelial Cell Line: BPH-1", *In Vitro Cell Dev. Biol.* 31A:14-24, Jan. 1995.  
 Castagnetta et al., "Prostate Long-Term Epithelial Cell Lines", *Annals of The New York Academy of Sciences*, vol. 595, pp. 149-164, 1990.  
 Boudou et al., "Distinct Androgen 5α-Reduction Pathways in Cultured Fibroblasts and Immortalized Epithelial Cells From Normal Human Adult Prostate", *The Journal of Urology*, vol. 152, 226-231, Jul. 1994.  
 Narayan et al., "Establishment and Characterization of a Human Primary Prostatic Adenocarcinoma Cell Line (ND-1)", *The Journal of Urology*, vol. 148, 1600-1604, Nov. 1992.  
 Rhim et al., "Stepwise immortalization and transformation of adult human prostate epithelial cells by a combination of HPV-18 and v-Ki-ras", *Proc. Natl. Acad. Sci. USA*, vol. 91, pp. 11874-11878, Dec. 1994.

(Continued)

*Primary Examiner*—Susan Ungar  
*Assistant Examiner*—Minh-Tam Davis  
 (74) *Attorney, Agent, or Firm*—Leydig, Voit & Mayer, Ltd.

(57) **ABSTRACT**

The present invention relates to immortalized, malignant, human, adult prostate epithelial cell lines or cell lines derived therefrom useful in the diagnosis and treatment of prostate cancer. More particularly, the present invention relates to cloned, immortalized, malignant, human, adult prostate epithelial cell lines and uses of these cell lines for the diagnosis and treatment of cancer. Furthermore, the present invention provides for the characterization of said cell lines through the analysis of specific chromosomal deletions.

**21 Claims, 6 Drawing Sheets**

## A.2.9. FILE 9:

Subject:  
 Picture  
 From:  
 Charlie <charlie@m57.biz>  
 Date:  
 Mon, 07 Dec 2009 11:44:18 -0800  
 To:  
 andy@swexpert.com

Andy,

Here's the picture I promised... Make sure you delete this.

C

**A.2.10. FILE 10:**

