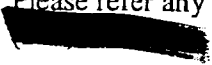August 1, 2008

Reply to Attn of: Office of the General Counsel

Dr. Robert Adams, CEO
Optima Technology Group
1981 Empire Road
Reno, NV 89521-7430
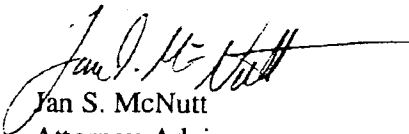
Re: U.S. Patents Nos. 5,904,724 and 5,566,073

Dear Dr. Adams:

We are in receipt of your letter dated July 14, 2008 informing our office of an assignment of two patents by the inventor Mr. Jed Margolin. While Mr. Margolin's infringement claims are currently under investigation, we do not have any information from Mr. Margolin confirming the alleged assignment of his patents to your firm. Although your letter included copies of two licensing agreements, there is likewise no evidence of an assignment of the said inventions in the communication you sent to us. Until we receive appropriate evidence of such an assignment, we are not able to respond to your request for a license from our Agency.

Please refer any future correspondence in this matter to the undersigned, Mr. Jan S. McNutt,

Sincerely,   *b(6)*

Jan S. McNutt
Attorney-Advisor

02577

From:	McNutt, Jan (HQ-MC000)
Sent:	Wednesday, August 06, 2008 9:44 AM
To:	'Jed Margolin'
Subject:	RE: NASA Case I-222
Attachments:	Margolin Letter 20080805.pdf

Dear Mr. Margolin,

Please see the attached. Hard copy to follow.

Jan S. McNutt
Attorney-Advisor (Commercial)
Office of the General Counsel
NASA Headquarters

██████████████████ b(6)

This document, including any attachments, contains information may be confidential, protected by the attorney-client or other applicable privileges, or constitutes non-public information. All content is intended only for the designated recipient(s). If you are not an intended recipient of this information or have received this message inadvertently, please take appropriate steps to destroy this content in its entirety and notify the sender of its destruction. Use, dissemination, distribution, or reproduction of this information by unintended recipients or in a manner inconsistent with its provision is not authorized and may be unlawful.

-----Original Message-----
From: Jed Margolin [mailto██████████████]
Sent: Tuesday, August 05, 2008 1:56 PM
To: McNutt, Jan (HQ-MC000)
Subject: NASA Case I-222

b(6)

Dear Mr. McNutt.

I have attached the documents we discussed.

Regards,

Jed Margolin

02573

National Aeronautics and Space Administration

Headquarters
Washington, DC 20546-0001

August 5, 2008

Reply to Attn of: Office of the General Counsel

Mr. Jed Margolin
1981 Empire Road
Reno, NV 89521-7430

Re: Administrative Claim of Jed Margolin for Infringement of U.S. Patent
Nos. 5,566,073 and 5,904,724; NASA Case No. I-222.

Dear Mr. Margolin,

We are in receipt of the Freedom of Information Act Request (FOIA) conveyed to us by email dated
June 30, 2008 in which you request copies of all documentation relating to your administrative claim
of infringement of U.S. Patent Nos. 5,566,073 and 5,904,724.
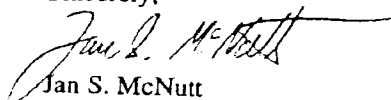
We regret the delay in processing your claim and assure you that we are now undertaking measures
to provide a resolution of your claim as soon as possible. Unfortunately. Mr. Alan Kennedy retired
from NASA earlier this year and the action on your claim was not conveyed to management in a
timely manner. In addition the local attorney responsible for review of your claim also departed
from NASA. We are now cognizant of the importance of proceeding with a review of the claim and
will contact you when we have reached a decision.

As to your FOIA request, as the investigation of your claim is ongoing, we kindly request that you
allow us a 90 day extension to answer this request. Within that time period we should be able to
obtain a better picture of our position vis-à-vis your claim and the request for documents may no
longer be required.

We should inform you that we have received a separate communication from a company Optima
Technology Group, claiming to have been assigned both of the patents in question. You informed
me telephonically that this is the case; however, we have no record of any assignment of your patents
to this firm and will need confirmation through appropriate attested documents delivered to the
agency in order to recognize any claim of ownership by a party other than the inventor.

Thank you for your patience in this matter. Please contact the undersigned a████████████
emai████████████ you have any additional questions or comments.

Sincerely,

Jan S. McNutt
Attorney-Advisor

02579

PATENT ASSIGNMENT

Whereas I, the undersigned, Jed Margolin having an address in Virginia City Highlands, Nevada have made certain inventions or discoveries (or both) set forth in the following-identified Letters Patent of the United States of America, and

Whereas Optima Technology Group Inc, a Delaware corporation having a place of business at 1981 EMPIRE Road, Reno, NV 89521-7430, which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits and privileges hereinafter recited;

Now, therefore, for valuable consideration furnished by Assignee to me, receipt and sufficiency of which is hereby acknowledged, I do hereby, without reservation:

1. Assign, transfer and convey to Assignee the entire right, title and interest in and to the following Letters Patent and to all inventions disclosed and/or claimed in U.S. Patent No. 5,566,073 issued October 15, 1996 for a Pilot Aid Using A Synthetic Environment and U.S. Patent No. 5,904,724 issued May 18, 1999 for Method and Apparatus For Remotely Piloting An Aircraft, and to any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries worldwide, including all divisional, renewal, substitute, continuation, continuing, Convention and non-Convention applications based in whole or in part upon said inventions or discoveries, or upon said Letters Patent, and any and all reissues, reexaminations, and extensions of said Letters Patent or upon said applications, reissues, reexaminations, and extensions and every priority right that is or may be predicated upon or arise from said inventions, said discoveries and/or said Letters Patent.

2. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue, transfer and record all said Letters Patent to and in the name of Assignee, as assignee of the entire right, title and interest therein or otherwise as Assignee may direct.

3. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to me or them, all acts reasonably serving to assure that the said inventions and discoveries, the said Letters Patent and patent applications shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by my heirs, legal representatives and assigns if this assignment had not been made.

In testimony of which I have executed this Assignment of Patent Application on the date indicated next to my name.

_Jed Margolin_____   Date:_7-20-2004___
Jed Margolin

██████████████████████████████████ 5

b(6)

FOIA NO. 10-F-2008-270

Hand-Carry Action Response to FOIA Office - Room 5K35

Action Assigned to: Code(s) ___See Below___ Date: _____ *SUSPENSE DATE: 6/17/2008

To Legal (legal review): _____

FOIA Request from: Jed Margolin   Date Request Rec'd: 6/30/2008

COMMENTS: Office of General Counsel

PLEASE COMPLETE BELOW:

Action Office: Code: _____   Attorney:

Name & Grade: _____   _____

SEARCH TIME: _____   _____
(Qtr. Hrs.)

☐ Recommend action be transferred to

☐ Additional records located at the National Records Center will be retrieved by this office and copies will be provided to the FOIA Office for review. (Contact the FOIA Office if records are determined to be voluminous.)

☐ Estimated volume of additional records: _____ (No. of Boxes)

☐ Estimated additional time needed to retrieve records: _____

☐ A search was conducted and no responsive records were located.

☐ Recommend action be transferred to _____

_____ _____ _____ _____
SIGNATURE OF INDIVIDUAL CERTIFYING ABOVE   GRADE   CODE   DATE

* The suspense date is assigned to allow for adequate review and processing time by the FOIA Office and the Legal Office to ensure issuance of a response in compliance within the 20 working days as required by law. All records provided by the action office are reviewed and release determination is based on NASA FOIA Regulations as published in the Federal Register under Title 14, Chapter V, Part 1206 (14CFR Part 1206)

Robinson, Kellie N. (HQ-NB000)

jm_nasa.pdf (106 KB)

----- Original Message -----
From: Jed Margolin ▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓▓ b(6)
To: nasafoia@nasa.gov <nasafoia@nasa.gov>
Sent: Sat Jun 28 21:05:56 2008
Subject: FOIA Request

This request is made pursuant to the Freedom of Information Act.

I would like all documents related to the Administrative Claim of Jed Margolin for
Infringement of U.S. Patent Nos. 5,566,073 and 5,904,724; NASA Case No. I-222.

I am attaching a letter dated June 11, 2003 from Alan Kennedy, Director, Infringement
Division, Office of the Associate General Counsel as file jm_nasa.pdf. I provided the
information requested, it was received by Mr. Kennedy, and thereafter Mr. Kennedy refused
to respond to my attempts to find out the results of the investigation.

I believe NASA has had enough time to have completed its investigation by now.

▓▓▓▓▓▓▓▓▓▓ b(6)

www.jmargolin.com <http://www.jmargolin.com>

08-270

02502

National Aeronautics and
Space Administration
Headquarters
Washington, DC 20546-0001

June 11, 2003

b(6)

Mr. Jed Margolin

▮▮▮▮▮▮▮▮▮▮▮▮▮▮

Re: Administrative Claim of Jed Margolin for Infringement of
U.S. Patent Nos. 5,566,073 and 5,904,724; NASA Case No. I-222

Dear Mr. Margolin:

Thank you for your letter dated June 7, 2003 regarding possible unauthorized uses by NASA
of inventions protected by U.S. Patent Nos. 5,566,073 and 5,904,724. You have identified
possible unauthorized uses in the X-38 project and other projects involving synthetic vision
technology. NASA considers this matter to be an administrative claim for patent infringe-
ment, and has assigned the claim NASA Case No. I-222. An investigation will now be
conducted to identify any unauthorized uses of the inventions claimed in the subject patents.
In order to proceed further with this investigation, we need you to provide us with the
following information:

(1)   The identification of all claims of the patent(s) alleged to be infringed.

(2)   The identification of all procurements known to the claimant or patent owner
which involve the alleged infringing item or process, including the identity of
the vendor or contractor and the Government procuring activity.

(3)   A detailed identification of the accused articles or processes, particularly where the
article or process relates to a component or subcomponent of the item procured,
an element by element comparison of the representative claims with the accused
article or process. If available, this identification should include documentation
and drawings to illustrate the accused article or process in suitable detail to enable
verification of the infringement comparison.

(4)   The names and addresses of all past and present licenses under the patent(s), and
copies of all license agreements and releases involving the patent.

(5)   A brief description of all litigation in which the patent(s) has been or is now
involved, and the present status thereof.

08-270

02593

6) A list of all persons to whom notices of infringement have been sent, including all departments and agencies of the Government, and a statement of the ultimate disposition of each.

(7) A description of Government employment or military service, if any, by the inventor and/or patent owner.

(8) A list of all Government contracts under which the inventor, patent owner, or anyone in privity with him performed work relating to the patented subject matter.

(9) Evidence of title to the patent(s) alleged to be infringed or other right to make the claim.

(10) A copy of the Patent Office file of the patent, if available, to claimant.

(11) Pertinent prior art known to claimant, not contained in the Patent Office file, particularly publications and foreign art.

In addition to the foregoing, if claimant can provide a statement that the investigation may be limited to the specifically identified accused articles or processes, or to a specific procurement, it may materially expedite determination of the claim.

If you have any questions, please feel free to contact me o█████████

Cordially,

Alan J. Kennedy
Director, Infringement Division
Office of the Associate General Counsel
(Intellectual Property)

OPTIMA
TECHNOLOGY GROUP

Main Office
Finance & Operation
1400 Tampen Rd.
Reno, NV 89521-2486
Tel. 919-419-6926
Fax. 949-226-7138

Monday, July 14, 2008

Mr. Alan J. Kennedy
Director, Infringement Division
Office of the Associate General Counsel
Office of the Aeronautics and Space Administration
Washington, D.C 20546-0001
Attn.: GP 02-37016

<div align="center">RE: Case number I-222</div>

Sir,

I have read all of the correspondence dating back to May 14, 2003 between NASA and Jed Margolin the inventor of U.S Patent 5,904,724 **Method and apparatus for remotely piloting an aircraft that NASA**. As you are well aware, this invention was infringed (literal infringement) by NASA and others at their direction.

My company has been assigned this patent as well as U.S. Patent 5,566,073 **Pilot Aid Using A Synthetic Environment** and we have since licensed L3 and Honeywell (please see attached copy of Honeywell and L3/Genève Aerospace agreement(s).

Your office has had these past 5 years and 7 months to offer up any prior art and has failed to do so in order to invalidate '724 and/or prove non-infringement. Clearly your office has failed, with that said you need now to pay for a license like the others for the use of our technology that you used and may still be using at NASA

We would welcome the opportunity to further discuss the matter directly as to your proper license if need be and/or through our Intellectually Property attorney Larry Oliverio who can be reached at ▬▬▬▬▬▬▬

Respectfully,

Dr Robert Adams, U.S. Navy Retired
CEO, Optima Technology Group

02595

World Headquarters

From:	Fein, Edward K. (JSC-AL)
Sent:	Wednesday, August 06, 2008 3:29 PM
To:	McNutt, Jan (HQ-MC000)
Cc:	Borda, Gary G. (HQ-MC000); Rotella, Robert F. (HQ-MA000)
Subject:	RE: Patent Infringement claim from Jed Margolin; NASA Case No. I-222

Jan ... I do vaguely recall this matter, but don't recall the outcome. I'm copying below tons of stuff I found on my computer using Google Desktop. I have not reviewed what I'm sending. There no doubt a good deal of redundancy, for which I apologize.

It looks like Langley may have taken the lead on this. Barry Gibbens at Langley appears to have worked it. Regrettably, Barry is deceased — a very sad story for another time. But Linda Blackburn may be of some assistance.

Let me take this opportunity to welcome you to the NASA team. I look forward to meeting you in the not too distant future.

-Ed

RE: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

From: Mike Abernathy██████████████>
To: 'Delgado, Francisco J. (JSC-ER2)█████████████>, 'Fein, Edward K. (JSC-AL)' ◄█████████ 'Kennedy, Alan J. (HQ-MC000)'████████████>,
████████████>
CC: Fredrickson, Steven E. (JSC-ER)'███████████a.gov>
Date: Sep 26 2006 - 12:13pm

Thank you very much. It means very much to Carolyn and I right now.

b(6)

Mike Abernathy

Rapid Imaging Software, Inc.

————

From: Delgado, Francisco J. (JSC-ER2) [mailt████████████ov]
Sent: Monday, September 25, 2006 9:42 PM
To: Mike Abernathy; Fein, Edward K. (JSC-AL); Kennedy, Alan J. (HQ-MC000██████████
Cc: Delgado, Francisco J. (JSC-ER2); Fredrickson, Steven E. (JSC-ER)
Subject: FW: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

See email from "Mr. Adams" below.

This is getting more ridiculous by the minute. I have resisted replying in any form as suggested by JSC council. However, this matter has been left open for quite some time and something needs to be done NOW. It has come to my attention that Mr. Adams and company have issued a letter that prohibits RIS from selling any of their software until this issue is resolved. We have had a very "intellectually" fruitful relationship with RIS for almost a decade and would like to

02590

continue this relationship for many years to come. Some of the technology concepts in question were co-developed by RIS and I during many "brainstorming sessions" on how to provide optimal situation awareness to various users.

The folks pressing forward with this claim do not have solid ground to stand on (IMHO). Based on the previous research performed, I do not see how their patent claims are valid and I would like to request that NASA's council take this matter seriously and get the patents invalidated (as it should have been done when this first showed up a couple of years ago). This is not only the right legal thing to do, but also the right moral thing to do. If we allow an individual to continue to harass small companies and stand-by with little/no action, then we are no better than the company doing the harassing. As a government organization, we need to keep the public faith and trust and again, "do the right thing." I realize that patience is important in legal matter, but believe that the time for sitting idle and hoping that this matter goes away is way past due and that something needs to be done ASAP. Putting companies that NASA relies on to help move technology forward out of business with a barrage of unwarranted litigation does not seem like it is in NASA's (or our taxpayers) best interest.

Please let me know what I need to do on my end to help move this along.

BTW: If we do not deal with issue immediately it will only get worse for NASA. I know of several Projects within JSC, JPL, and Langley that use independently developed technology (i.e. technology that does not use what RIS and I came up with) that I am sure Mr. Adams and company would claim infringes on their "Patents." We seem to be on his radar at the moment because we do what government organizations are encouraged to do ("Publish their work").

Thank You,

Frank Delgado

——

b(6)

From: Robert Adams [mailto████████████████████]
Sent: Mon 9/25/2006 5:58 PM
To: Delgado, Francisco J. (JSC-ER2)
Subject: RE: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

Sir,

Since you have clearly refused to cooperate, please provide us your department's heads information and said contact information including a contact in your IP litigation department. We are aware that you received your read receipt of our email sent to you regarding:

Let us chat on about SCOUT, SC3D, the X-38 program, and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We simple have one goal in mind and that is have a chat regarding the technology and that RIS and NASA take a license of said IP technology.

Thank you

b(6)

_____
From: Delgado, Francisco J. (JSC-ER2) [mailto████████████████████]

2

02597

Sent: Tuesday, September 19, 2006 7:30 AM
Subject: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

Your message

> To: Delgado, Francisco J. (JSC-ER2)
>
> Cc:
>
> Subject: Let us chat on about SCOUT, SC3D, the X-38 program and RIS;
>
> noted below are our patents that cover said technology that RIS and your
>
> groups are using.
>
> Sent: Tue, 19 Sep 2006 08:52:25 -0500
>
> was read on Tue, 19 Sep 2006 09:30:05 -0500

~~~

RE: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

From: Fein, Edward K. (JSC-AL) ███████████████
To: Delgado, Francisco J. (JSC-ER2)██████████████, Kennedy, Alan J. (HQ-MC000) ◄██████████
Date: Sep 26 2006 - 10:58am

b(6)

Frank ... I've talked with Alan, and he said he'd respond, and give you a call.

-Ed

~~~

RE: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

From: Mike Abernathy ██████████████
To: 'Delgado, Francisco J. (JSC-ER2)' ◄██████████, 'Fein, Edward K. (JSC-AL)' ██████████ennedy, Alan J. (HQ-MC000)'████████
CC: ███████, Steven E. (JSC-ER)' ██████████████@██████ ►
Date: Sep 26 2006 - 12:13pm

b(6)

Thank you very much. It means very much to Carolyn and I right now.

Mike Abernathy

Rapid Imaging Software, Inc.

From: Delgado, Francisco J. (JSC-ER2) [██████████████████████████] **b(6)**
Sent: Monday, September 25, 2006 9:42 PM
To: Mike Abernathy; Fein, Edward K. (JSC-AL); Kennedy, Alan J. (HQ-MC00█████████████████
Cc: Delgado, Francisco J. (JSC-ER2); Fredrickson, Steven E. (JSC-ER)
Subject: FW: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

See email from "Mr. Adams" below.

This is getting more ridiculous by the minute. I have resisted replying in any form as suggested by JSC council. However, this matter has been left open for quite some time and something needs to be done NOW. It has come to my attention that Mr. Adams and company have issued a letter that prohibits RIS from selling any of their software until this issue is resolved. We have had a very "intellectually" fruitful relationship with RIS for almost a decade and would like to continue this relationship for many years to come. Some of the technology concepts in question were co-developed by RIS and I during many "brainstorming sessions" on how to provide optimal situation awareness to various users.

The folks pressing forward with this claim do not have solid ground to stand on (IMHO). Based on the previous research performed, I do not see how their patent claims are valid and I would like to request that NASA's council take this matter seriously and get the patents invalidated (as it should have been done when this first showed up a couple of years ago). This is not only the right legal thing to do, but also the right moral thing to do. If we allow an individual to continue to harass small companies and stand-by with little/no action, then we are no better than the company doing the harassing. As a government organization, we need to keep the public faith and trust and again, "do the right thing." I realize that patience is important in legal matter, but believe that the time for sitting idle and hoping that this matter goes away is way past due and that something needs to be done ASAP. Putting companies that NASA relies on to help move technology forward out of business with a barrage of unwarranted litigation does not seem like it is in NASA's (or our taxpayers) best interest.

Please let me know what I need to do on my end to help move this along.

BTW: If we do not deal with issue immediately it will only get worse for NASA. I know of several Projects within JSC, JPL, and Langley that use independently developed technology (i.e. technology that does not use what RIS and I came up with) that I am sure Mr. Adams and company would claim infringes on their "Patents." We seem to be on his radar at the moment because we do what government organizations are encouraged to do ("Publish their work").

Thank You,

Frank Delgado

b(6)

From: Robert Adams [m█████████████████████████]
Sent: Mon 9/25/2006 5:58 PM
To: Delgado, Francisco J. (JSC-ER2)
Subject: RE: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

Sir,

Since you have clearly refused to cooperate, please provide us your department's heads information and said contact information including a contact in your IP litigation department. We are aware that you received your read receipt of our email sent to you regarding:

Let us chat on about SCOUT, SC3D, the X-38 program, and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

4

02590

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We simple have one goal in mind and that is have a chat regarding the technology and that RIS and NASA take a license of said IP technology.

Thank you

From: Delgado, Francisco J. (JSC-ER2) ▮▮▮▮▮▮▮▮▮▮
Sent: Tuesday, September 19, 2006 7:30 AM
Subject: Read: Let us chat on about SCOUT, SC3D, the X-38 program and RIS; noted below are our patents that cover said technology that RIS and your groups are using.

Your message

To: Delgado, Francisco J. (JSC-ER2)

Cc:

Subject: Let us chat on about SCOUT, SC3D, the X-38 program and RIS;

noted below are our patents that cover said technology that RIS and your

groups are using.

b(6)

Sent: Tue, 19 Sep 2006 08:52:25 -0500

was read on Tue, 19 Sep 2006 09:30:05 -0500

~~~

✉ FW: and the very last communication of the day

From: Fein, Edward K. (JSC-AL) ▮▮▮▮▮▮▮▮▮▮
To: Kennedy, Alan J. (HQ-MC000) ▮▮▮▮▮▮
CC: Borda, Gary G. (HQ-MC000) ▮▮▮▮▮▮▮▮
Date: Sep 26 2006 - 8:11am

🖉 PSISDG_3691_1_149_1.pdf - 4.7MB - View in Outlook

fyi ...

From: Mike Abernathy [mailto:▮▮▮▮▮▮▮▮▮▮
Sent: Monday, September 25, 2006 8:18 PM
To: Delgado, Francisco J. (JSC-ER2); Fein, Edward K. (JSC-AL)
Subject: FW: and the very last communication of the day

02600

Mike Abernathy

Rapid Imaging Software, Inc.

b(6)

———

Hi All,

Let me summarize what I think has just happened to our company.

In late 1995 we introduce our LandForm synthetic vision system to the market as COTS software product.

In 1997/8 we sell this to NASA and together we are the first people on earth to create a synthetic vision flight guidance system for a remotely piloted vehicle. Starting in 1998 the X38 is captive carried and test flown using this system. We documented our success in the attached document written in 1998 and published in early 1999. It was my privilege to be at Edwards when it happened, and is the highlight of my career until the program is cancelled in 2002.

We go on and demonstrate that our software can be used as pilot aid to other UAVs including Predator, Shadow, Tern, and many more. We receive no interest in this application, but instead they use it for sensor operator stations. It is a commercial success and people say good things about it. It is sold to mostly to a commercial UAV manufacturer named AAI Corporation. Many tests are done and the military guys all like it.

In 1999 the patent office issues a patent to a former Atari employee named Margolin for a Synthetic Environment for Remotely Piloted Vehicle. He had evidently applied for it in 1996. Shortly thereafter he begins to complain to NASA that they and RIS infringed upon his patent presumably by flying a system 2 years before he received his patent. Is this a joke?

In 7 years he never so much as asked RIS about using his technology. Margolin as best I can tell never built this system and never test flew it. Can't say as I blame him because his system looks to me like a crater looking for an address. It cannot be safely operated in the form patented (no autopilot). No one is even stupid enough to build it this way, not even him.

02601

Sometime after that, I am alerted to the patent. I read it, but since there are major differences in the way X-38 worked with our software, I felt strongly that we had not infringed. I provide this information, plus evidence of prior art to NASA legal counsel. I am troubled because really I can't see how his system could fly because it would fail during link loss. Margolin also had a patent on synthetic vision for manned aircraft (if you can imagine) and we found copious prior art for that. I am also troubled because I never hear that the request for reexamination has been sent in by NASA.

Last week I received an email from Optima technology group threatening (thinly veiled) to destroy our relationships with our customers and sue us if we don't license their technologies. We explain that we do not sell software for use in piloting unmanned aerial vehicles any more owing to insurance which is true. We had demonstrated this in the past, but there really is not much market that we could see. We also explained that we had not infringed and why we thought we had been respectful of their patent, but they just tried to make it look like we infringed. But we did not.

They know we cannot withstand the onslaught of their lawsuits, even though we are clearly and obviously not guilty of infringement. They think that we will have to fold and accept their license, but we cannot do this because they are legal blackmailers, and because they are selling defective technology. If we give in, then they will just destroy some other little companies they way they did ours. And we cannot let anyone pay them off for us, because that just gives them funds to go destroy another company. For many years our company has tried to provide an innovative product with an excellent value and never compromise our integrity. I cannot let this nonsense bring that to an end by pretending that we are licensing technology when what they are selling is a fraud.

When I asked politely if their system has ever been tested Mr. Adams simply tells us to go get a lawyer, he is referring the matter for filing. I felt that it was not unreasonable to ask to know this but it really made him furious. Anyway I told him to tell it to our lawyer Mr. Ben Allison of Sutinfirm with whom I shall meet tomorrow. Tonight they said that they will issue a cease and desist order, which I believe means that we will be unable to sell our software anymore which will destroy our income stream and that will be it. I can't waste anymore time on this now. It is time for me to get back to work on things that matter for our users.

I have a docs appointment tomorrow at 8-10 local time. I had throat surgery recently so I really can't talk and frankly I find I tend to break into tears very frequently when I try to do so. But I want you all to know that I will stand firm until it is over. What would the soldiers who have used our software in combat think of me if I gave ground? Then bring it on.

I know it sounds bad for us right now, but remember that whatever happens to us no one can take away the honor and the privilege of working with NASA, the OSD, and all the other completely excellent people with whom we have worked.

Mike Abernathy

Rapid Imaging Software, Inc.

Attached are the other communications from them.

From: Robert Adams ███████████████████████
Sent: Monday, September 25, 2006 3:31 PM
To: 'Mike Abernathy'
Subject: RE: license

b(6)

Mike,

Let me try and be clear, all such development at OTG on behalf and or/or by our licensee is covered by NDA's and thus our company can be sued should we violate such agreements. As to your company's infringement of our patents, since that was clearly not covered by a NDA with us; please provide said information in detail:

Other then those items listed at your website and NASA's, what other projects did you do that infringed on our invention? If so when, where, and how?
Who at NASA flight-tested your product that used our invention? Please provide us with the name of the Pilot in Command, the responsible Flight Test Engineer, the model and block number of the vehicle and GCS, and the range or location at which such testing might have taken place with NASA and others. Also, indicate the dates of such testing. If flight test reports are available, as well please provide them to us.

Mike, I have no time to play games with someone who clearly infringes and thinks nothing of respecting our IP.

I will forward said matter to our legal department for further research and filing in accordance with the Federal laws. Please have your legal IP counsel contact our attorneys.

Robert Adams

From: Mike Abernathy█████████████
Sent: Monday, September 25, 2006 2:26 PM
To: 'Robert Adams'
Subject: RE: license

b(6)

Robert,

You have offered to license your technology to our company. You have stated that this technology is useful for "see and avoid applications" for UAVs which is an interesting market arena. We are making a good faith effort to consider your offer. We must know whether this technology has been brought into existence and whether it was ever test flown as a matter of due diligence.

We are not asking these questions out of idle curiosity and we certainly not trying to be difficult – we need this information in order to know the market value of the technology to our users, and there are certain elements of the method that we have concerns about. A flight test report – even if the system was implemented on a model airplane – will almost certainly allay our concerns and we can get on with this. The fact of whether or not this technology has been tested does not require an NDA.

02603

Robert, throughout our dealings I have been honest and responsive to all of your requests, perhaps at peril to our company. I now ask you to please reciprocate my efforts in a small way and provide the requested information so that we may consider your offer of license.

Mike Abernathy

Rapid Imaging Software, Inc.

_____

From: Robert Adams ██████████████████████████ b(6)
Sent: Monday, September 25, 2006 2:49 PM
To: 'Mike Abernathy'
Subject: RE: license

Mike,

Neither the company nor I are in any way anxious in signing any more licensees's as we have many already, but as you know we must protect our patents in order to preserve said Intellectual Property.

As to your questions, they do not relate to a license and/or a licensee. Our Intellectual Property has been tested in court and is proven solid by far such standards the Federal Court including the Federal Appeals Court. In addition, as to matters of disclosure, all such development at OTG and by our licensee is covered by NDA's.

Should you wish to challenge such, then I advise you to seek proper legal counseling as we are not an attorney nor will ours advice you on such a matters.

Your company has clearly infringed and OTG must protect itself against such matters just as your company would do if in the same position.

Robert Adams

_____

From: Mike Abernathy ███████████████████ b(6)
Sent: Monday, September 25, 2006 1:29 PM
To: 'Robert Adams'
Subject: license

Dear Robert,

Please tell the legal team thanks for getting back to us right away – we appreciate it.

9

02604

You have asked us to consider licensing and this we are now doing. In the interest of due diligence as a prospective licensor of your technology, we ask that you provide us with the following information about the subject invention:

Was this invention ever constructed? If so when, where, and how?
Was this invention ever flight tested? Please provide us with the name of the Pilot in Command, the responsible Flight Test Engineer, the model and block number of the vehicle and GCS, and the range or location at which such testing might have taken place. Also, indicate the dates of such testing. If flight test reports are available please provide them to us, as well.

I know that you are anxious for us to consider your license offer, please provide us with this information.

Mike Abernathy

Rapid Imaging Software, Inc.

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latest from Optima

From: Mike Abernathy ██████████████████
To: FEIN, EDWARD K. (JSC-HA) (NASA)████████████████▶, Kennedy, Alan J. (HQ-MC000)██████████████
Date: Sep 25 2006 - 3:08pm

📎 image002.gif - 6.9k - <u>View in Outlook</u>

b(6)

Ed,

This has not blown over. We would rather lose our company than see NASA hurt by this. Ed, it appears that RIS situation is hopeless. They know that we did not infringe, yet they continue because they know that we lack the funds to fight them. Our situation appears hopeless but we cannot accept a license for technology that we know is dangerous to the public, so I cannot accept this deal that they have offered.

Let us know what you think as soon as possible.

Mike Abernathy

Rapid Imaging Software, Inc.

From: Robert Adams ████████████████████████████████

02605

10

Privileged and Confidential Settlement Communications Protected

Under Rule 408 of the Federal Rules of Evidence

Mike,

My legal team has read your response and it is a personal shame since you would rather cut and run verse facing the facts and take a license for past and future business, as I am sure it would be substantially less then litigation.

As you have been made aware in our prior communications, among other inventions, the Patents protect a number of features that are implemented in products capable of flying any and all UAV's (1.3) remotely and/or using Synthetic Vision and/or using a synthetic environment.

1.1   "Patent Portfolio" shall mean the portfolio consisting of United States Patent Numbers 5,904,724 (Method and Apparatus for Remotely Piloting an Aircraft), 5,566,073 (Pilot Aid Using a Synthetic Environment), and those future United States patents that may be added in accordance with the covenants and warranties.

1.2   "RPV" shall mean "remotely piloted vehicle." A "remotely piloted aircraft" is an RPV. "UAV" shall mean "unmanned aerial vehicle." RPV is an older term for UAV. "UCAV" shall mean "Unmanned Combat Aerial Vehicle." UCAV is also sometimes defined as an "Uninhabited Combat Aerial Vehicle." UCAV is a UAV that is intended for use in combat. UCAS means "Unmanned Combat Air System."

1.3   "Synthetic Vision" is the current term for "Synthetic Environment" and is the three dimensional projected image data presented to the pilot or other observer.

Of the ten companies responsible for the establishment of UAV Specifications or standard, eight of those companies sell UAV-Devices under brands they control, and each of those companies, i.e., Boeing Aerospace; Lockheed; Nakamichi Corporation; General Atomics Corporation; L-3 and Jacor Corporation; Raytheon; and Geneva Aerospace, pay Optima running royalties for the above referenced patents.

The substantial terms and conditions of our licensing Agreement: i) resulted from negotiations with the market leading manufacturers of UAV's; ii) are subject to most favored nation clauses; and iii) are, therefore, not negotiable.

The Agreement i) is exceedingly fair; ii) does not obligate Infringer to anything more than an industry accepted reasonable royalty for the Patents; iii) does not obligate Infringer to anything more than an industry accepted reasonable terms; and iv) may be canceled by Infringer at any time.

Mike, there is no reason to permit Infringer (Your company) to further drag on the execution of said Agreement based on the facts present on the infringement matter.

Infringer must appreciate that the Patents cover a range of different inventions required to implement the UAV using Synthetic Vision Specifications; and there exists pending divisions of the Patents having claims that are read on by implementation of the UAV Specifications. Infringer principal competitors have appreciated the exceptional litigation strength and flexibility of my patent portfolio and have decided to accept a license rather than expose themselves to an injunction.

Infringer must appreciate that if litigation between the parties is initiated: i) the matter will immediately become personal for both parties; ii) I do not have to account to any other person; and iii) no license or settlement of any kind will ever be possible under any of my intellectual properties. Infringer's competitors require that Infringer be either licensed or enjoined.

I have resolved myself to this course of action in the event an agreement reached shortly, I firmly believe that enjoining Infringer from selling UAV-Devices will not result in lost royalties; and it is in Optima's long-term interests to make an example of a company that has refused to take a license.

Anyone who is fully knowledgeable of the strength and scope of my patent portfolio, and who appreciates the risk-taking and tenacity that I have demonstrated, would not, in light of the terms being offered, recommend jeopardizing the UAV business Infringer enjoys in the U.S.

1.

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them, we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

RIS own admission they knew about '724 will go to show that their infringement was willful, which means treble damages Robert. (They probably found out about it when NASA interviewed Jed about their X-38 project.) We will find out at trail and/or during the discover phase.

From their web site: http://www.landform.com/

SmartCam3D provides unparalleled situation awareness for UAS sensor operators. It fuses video with synthetic vision to create the most powerful situation awareness technology currently available. SmartCam3D is an augmented reality system that has been developed, flight tested, and deployed in the most demanding conditions including combat, and as a result it is highly evolved technology which is in use today around the world. The reason that SmartCam3D is so popular is simple: it makes sensor operators more effective, and reduces the target response time. SmartCam3D is deployed with US Army Shadow UAV, and is at present being integrated to the USAF Predator, as well as the Army Warrior UAS. SmartCam3D is the war fighter's choice for sensor operator situational awareness.

Improving a patented invention by adding something to it (in this case fusing video with synthetic vision) is still

infringement. Indeed, you may be able to patent the improvement. However, you may not practice the improved invention without the permission of the original patent holder. (It also means that the holder of the original patent may not practice your improvement without your permission.)

Since they publicly admit SmartCam3D is being used with US Army Shadow, USAF Predator, and Army Warrior his statement "no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations" is obviously false.

Also from their web site:

Software License Changes

RIS, Inc. changed insurance carriers, and effective September 1st, 2006 we updated our Software User License agreement. It now states that "The user is prohibited from using this software to pilot manned or unmanned aircraft." Our licenses have always prohibited use of our software for piloting manned aircraft. As you know, we had hoped that we would find a market for our UAV Glass Cockpit Product line. However, there is simply not sufficient market interest for us to bring such a product to market at this time, so we have decided not to release it. As a small company, we need to focus on our energy on the Sensor Operator and Intelligence Analyst at this time.

He is saying that his product should not be used for the very purpose it being advertised, sold, and used for. Lame. And it doesn't get him off the hook as he is still legally liable.

Since it did not state this until September 1, 2006, he has started to take this seriously, and he is clearly worried thus, he changed the terms to try to reduce the liability. I will have our team use wayback site and pull up the old Software User License agreement prior to Sept 1, 2006 this is when I bet they made all their sales and that is what OTG would be entitled too as well.

Here is a short lesson on infringement for Mike.

From: : http://inventors.about.com/library/bl/toc/bl_patent-infringement.htm

Text Box: Infringement can be direct, indirect, or contributory. Anyone who makes, uses, or sells the patented invention is a direct infringer. If a person actively encourages another to make, use, or sell the invention, the person so inducing is liable for indirect infringement. Contributory infringement can be committed by knowingly selling or supplying an item for which the only use is in connection with a patented invention. Good faith or ignorance is no defense for direct infringement, but it can be for indirect or contributory infringement. The remedies for infringement consist of: 1. Injunctive relief,
2. damages (including treble damages for willful infringement),
3. attorneys' fees in some cases, and
4. court costs.

2.

We discovered that the system described the in patent pertaining to remotely piloted vehicles USP 5,904,724 contains an entire clause in claim 1 that did not exist in the X38 or other UAVs that we have seen – this is the final paragraph of clause 1 regarding the method for handling delay in the control loop by "adjusting control sensitivity". This simply is not present in any form in any vehicles with which we have experience. Since all claims of this patent include this clause by reference, that patent is not relevant to these vehicles because none of them have this feature.

The clause he is referring to is:

a set of one or more remote flight controls coupled to said computer for inputting said flight control information, wherein said computer is also for determining a delay time for communicating said flight data between said computer and said remotely piloted aircraft, and wherein said computer adjusts the sensitivity of said set of one or more remote flight controls based on said delay time.

Time delays in a control system are unavoidable. Normally, a control system has fixed time delays and the system is designed to operate properly with these time delays. Because of the complexity of a UAV system these time delays may

02608

not be known at the time the system (including the control laws) are designed. These time delays may also change during a mission due to the communications path changing. If the system does not properly deal with these changing time delays it will lead to pilot-induced oscillation and there is a good chance the aircraft will crash.

Anyone designing a UAS that does not adjust for changing time delays is an idiot. I don't think the people making UAVs are idiots. That does not relieve him of contributory infringement. It is likely that these time delays are dealt with as part of the control law system which Abernathy might not be privy to and thus a court order will provide us his insider info.

3.

More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

The fact that '724 does not explicitly teach an autopilot is irrelevant. Adding an autopilot to '724 is still infringement, just as adding a video overlay is infringement.

There is also the matter of the Doctrine of Equivalence. See attached file patents1.pdf

Consider Column 2, lines 12-18:

The computers in the system allow for several modes of operation. For example, the remote aircraft can be instructed to fly to given coordinates without further input from the remote pilot. It also makes it possible to provide computer assistance to the remote pilot. In this mode, the remote flight control controls absolute pitch and roll angles instead pitch and roll rates which is the normal mode for aircraft.

That legal sounds like a defined autopilot to me and that as we need to show infringement at the Markman hearing..

4.

There is another on-board component called a SAS or Stability Augmentation System found on most large modern UAVs such as Predator, and which performs additional real-time stabilization to that done by the autopilot. Again, the SAS is not contemplated by the Margolin patent, yet is required to dampen control system oscillations in order to safely operate a UAV in systems that may suffer from communications delays to remote user control inputs. There are many more differences that we found when we first examined it, but as you can see we have never worked with a vehicle upon which your system could have been implemented and safely flown, and therefore we realized that it is impossible for us to have infringed this patent 5,904,724. You may easily independently verify the fact of these profound and fundamental differences from your system by examining the printed published materials regarding UAV control system and NASAs many publications on X-38 control systems.

Again, adding something to '724 is still infringement.

As far as examining the control systems on NASA's X-38 project is concerned, in a telephone conversation with NASA's Alan Kennedy in the Office of the General Counsel on February 9, 2006, he repeated his claim that, "The X-38 does fly." NASA has a video of the X-38 (flying) on its web site. (See http://www.dfrc.nasa.gov/Gallery/Movie/X-38/HTML/EM-0038-

5.

We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

We still have him on infringing on '724.

6.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

From: Mike Abernath█████████████████
Sent: Monday, September 25, 2006 9:08 AM
To: 'Robert Adams'
Subject: question

b(6)

Robert,

Thanks for your offer to call but I am still getting over throat surgery from 2 weeks ago so my phone is forwarded, but I look forward to email from you and/or your attorneys.

In trying to understand the value of your IP I would like to ask 2 questions regarding USP 5,904,724. Was this system ever built? Was it ever flight tested? Of course you need not answer, but it really would be helpful in understanding what is required to get your technology to market.

Mike Abernathy

Rapid Imaging Software, Inc.

From: Robert Adam█████████████████████████
Sent: Monday, September 25, 2006 8:55 AM
To: 'Mike Abernathy'
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Mike,

02610

Thanks for your email, I will forward it today over to my patent and review legal team. Once they complete a review of your comments, I will give you a ring on the phone and a response via the post and/or attorneys.

Respectfully,

Robert Adams

———

b(6)

Dear Mr. Adams,

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

We discovered that the system described the in patent pertaining to remotely piloted vehicles USP 5,904,724 contains an entire clause in claim 1 that did not exist in the X38 or other UAVs that we have seen – this is the final paragraph of clause 1 regarding the method for handling delay in the control loop by "adjusting control sensitivity". This simply is not present in any form in any vehicles with which we have experience. Since all claims of this patent include this clause by reference, that patent is not relevant to these vehicles because none of them have this feature.

More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would

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0261

be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

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We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

We will get back to you just as soon as we have had a chance to study these patent claims further. For now, is there anything else that our company can reasonably do in regard to the concern that you expressed?

Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

From: Robert Adams ████████████████████████████]
Sent: Tuesday, September 19, 2006 7:53 AM
To: ████████████████
Cc: ████████████
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

b(6)

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

02612

September 19, 2006

Michael F. Abernathy

Rapid Imaging Software, Inc.

Sent via US MAIL, FAX & EMAIL

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-

██ o arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-

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b(6)

FW: question

From: Mike Abernathy ███████████ com>
To: DELGADO FRANCISCO J. (FRANK)   'Fein, Edward K.
(JSC-AL)' ███████████   'Kennedy, Alan J. (HQ-MC000)'
██████████████████
Date: Sep 25 2006 - 11:44am

One more FYI.

Mike Abernathy

Rapid Imaging Software, Inc.

_____

From: Mike Abernathy [mailto:mikea@landform.com]
Sent: Monday, September 25, 2006 10:08 AM
To: 'Robert Adams'
Subject: question

Robert,

Thanks for your offer to call but I am still getting over throat surgery from 2 weeks ago so my phone is forwarded, but I look forward to email from you and/or your attorneys.

In trying to understand the value of your IP I would like to ask 2 questions regarding USP 5,904,724. Was this system ever built? Was it ever flight tested? Of course you need not answer, but it really would be helpful in understanding what

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02614

is required to get your technology to market.

Mike Abernathy

Rapid Imaging Software, Inc.

Mike,

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Respectfully,

Robert Adams

b(6)

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We discovered that the system described the in patent pertaining to remotely piloted vehicles USP 5,904,724 contains an

02615

entire clause in claim 1 that did not exist in the X38 or other UAVs that we have seen – this is the final paragraph of clause 1 regarding the method for handling delay in the control loop by "adjusting control sensitivity". This simply is not present in any form in any vehicles with which we have experience. Since all claims of this patent include this clause by reference, that patent is not relevant to these vehicles because none of them have this feature.

More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

There is another on-board component called a SAS or Stability Augmentation System found on most large modern UAVs such as Predator, and which performs additional real-time stabilization to that done by the autopilot. Again, the SAS is not contemplated by the Margolin patent, yet is required to dampen control system oscillations in order to safely operate a UAV in systems that may suffer from communications delays to remote user control inputs. There are many more differences that we found when we first examined it, but as you can see we have never worked with a vehicle upon which your system could have been implemented and safely flown, and therefore we realized that it is impossible for us to have infringed this patent 5,904,724. You may easily independently verify the fact of these profound and fundamental differences from your system by examining the printed published materials regarding UAV control system and NASAs many publications on X-38 control systems.

We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

We will get back to you just as soon as we have had a chance to study these patent claims further. For now, is there anything else that our company can reasonably do in regard to the concern that you expressed?

02615

Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

From: Robert Adams ████████████████████████████
Sent: Tuesday, September 19, 2006 7:53 AM
To: ████████████
Cc ████████████
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

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It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

---

b(6)

September 19, 2006

Michael F. Abernathy

Rapid Imaging Software, Inc.

████████████████████
████████████████

Sent via US MAIL, FAX & EMAIL

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

22

02617

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-CD08-47B5-A58D-A825698FD5EB&start=0&len=6480&src=&type=x&to▓▓▓▓▓▓▓▓▓▓▓cc=&bcc=&subject=&body=&curmbox=00000000-0000-0000-0000-000000000001&a=ad17460c4976d4c8a2dcf004b74ca88163cef3516fe0531abada331a64870d4d▓▓▓▓▓▓▓▓ arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-

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✉ RE: Rapid Imaging Software, Inc. patent infringement

From: Fein, Edward K. (JSC-AL)▓▓▓▓▓▓▓▓▓▓>
To: Mike Abernathy▓▓▓▓▓▓▓▓, DELGADO FRANCISCO J. (FRANK)
CC: Kennedy, Alan J. (HQ-MC000)▓▓▓▓▓▓▓▓▓▓▓
Date: Sep 25 2006 - 10:38am

b(6)

Thanks, Mike.

-Ed

02618

From: Mike Abernathy [mail█████████████████]
Sent: Monday, September 25, 2006 10:32 AM
To: Fein, Edward K. (JSC-AL); DELGADO FRANCISCO J. (FRANK)
Cc: Kennedy, Alan J. (HQ-MC000)
Subject: FW: Rapid Imaging Software, Inc. patent infringement

FYI

Mike Abernathy

Rapid Imaging Software, Inc.

<div style="text-align: right;">

b(6)

</div>

From: Robert Adams [mail█████████████████████]
Sent: Monday, September 25, 2006 8:55 AM
To: 'Mike Abernathy'
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Mike,

Thanks for your email, I will forward it today over to my patent and review legal team. Once they complete a review of your comments, I will give you a ring on the phone and a response via the post and/or attorneys.

Respectfully,

Robert Adams

From: Mike Abernathy [mail█████████████████]
Sent: Sunday, September 24, 2006 4:29 PM
To: 'Robert Adams'
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Dear Mr. Adams,

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

We discovered that the system described the in patent pertaining to remotely piloted vehicles USP 5,904,724 contains an entire clause in claim 1 that did not exist in the X38 or other UAVs that we have seen – this is the final paragraph of clause 1 regarding the method for handling delay in the control loop by "adjusting control sensitivity". This simply is not present in any form in any vehicles with which we have experience. Since all claims of this patent include this clause by reference, that patent is not relevant to these vehicles because none of them have this feature.

More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

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We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

02620

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

We will get back to you just as soon as we have had a chance to study these patent claims further. For now, is there anything else that our company can reasonably do in regard to the concern that you expressed?

Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

b(6)

From: Robert Adams ████████████████████████████
Sent: Tuesday, September 19, 2006 7:53 AM
To: ██████████████
Cc: ██████████████
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

September 19, 2006

Michael F. Abernathy

Rapid Imaging Software, Inc.

████████████████
████████████████

02621

Sent via US MAIL, FAX & EMAIL

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-CD08-47B5-A58D-A825698FD5EB&start=0&len=6480&src=&type=x&to███████████cc=&bcc=&subject=&body=&curmbox=00000000-0000-0000-0000-000000000001&a=ad17460c4976d4c8a2dcf004b74ca88163cef3516fe0531abada331a64870d4█████████████ arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

b/(6)

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-

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✉ **RE: Rapid Imaging Software, Inc. patent infringement**   02622

From: Fein, Edward K. (JSC-AL) ███████████████
To: Mike Abernathy ████████████████, DELGADO FRANCISCO J. (FRANK)
███████ov>
Cc: Kennedy, Alan J. (HQ-MC000) ████████████████
Date: Sep 25 2006 - 10:38am

Thanks, Mike.

-Ed

————

From: Mike Abernath█████████████████
Sent: Monday, September 25, 2006 10:32 AM
To: Fein, Edward K. (JSC-AL); DELGADO FRANCISCO J. (FRANK)
Cc: Kennedy, Alan J. (HQ-MC000)
Subject: FW: Rapid Imaging Software, Inc. patent infringement

$b(6)$

FYI

Mike Abernathy

Rapid Imaging Software, Inc.

————

From: Robert Adam█████████████████
Sent: Monday, September 25, 2006 8:55 AM
To: 'Mike Abernathy'
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Mike,

Thanks for your email, I will forward it today over to my patent and review legal team. Once they complete a review of your comments, I will give you a ring on the phone and a response via the post and/or attorneys.

Respectfully,

Robert Adams   02623

From: Mike Abernath██████████████████████
Sent: Sunday, September 24, 2006 4:29 PM
To: 'Robert Adams'
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Dear Mr. Adams,

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

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More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

There is another on-board component called a SAS or Stability Augmentation System found on most large modern UAVs such as Predator, and which performs additional real-time stabilization to that done by the autopilot. Again, the SAS is not contemplated by the Margolin patent, yet is required to dampen control system oscillations in order to safely operate a UAV in systems that may suffer from communications delays to remote user control inputs. There are many more

02624

differences that we found when we first examined it, but as you can see we have never worked with a vehicle upon which your system could have been implemented and safely flown, and therefore we realized that it is impossible for us to have infringed this patent 5,904,724. You may easily independently verify the fact of these profound and fundamental differences from your system by examining the printed published materials regarding UAV control system and NASAs many publications on X-38 control systems.

We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

We will get back to you just as soon as we have had a chance to study these patent claims further. For now, is there anything else that our company can reasonably do in regard to the concern that you expressed?

Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

———

From: Robert Adams ████████████████████████████
Sent: Tuesday, September 19, 2006 7:53 AM
To: ██████████████████
Cc: ████████████
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

b(6)

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

———

September 19, 2006

02625

Michael F. Abernathy

Rapid Imaging Software, Inc.

███████████████

███████████████

Sent via US MAIL, FAX & EMAIL

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-CD08-47B5-A58D-A825698FD5EB&start=0&len=6480&src=&type=x&to███████████████&cc=&bcc=&subject=&body=&curmbox=00000000-0000-0000-0000-000000000001&a=ad17460c4976d4c8a2dcf004b74ca88163cef3516fe0531abada331a64870d4c████████████ ██to arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-

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✉ RE: Rapid Imaging Software, Inc. patent infringement

From: Fein, Edward K. (JSC-AL) ████████████████
To: Mike Abernathy█████ ████████ Delgado, Francisco J. (JSC-ER2)
███████████████ Kennedy, Alan J. (HQ-MC000)████████████████
Date: Sep 25 2006 - 9:59am

Thanks, Mike!

b(6)

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✉ RE: Rapid Imaging Software, Inc. patent infringement

From: Fein, Edward K. (JSC-AL)████████████████>
To: Delgado, Francisco J. (JSC-ER2)██████████████████>, Mike Abernathy
████████████████ Kennedy, Alar███████████████>
Date: Sep 25 2006 - 8:55am

I'm including Alan Kennedy, the attorney at NASA Headquarters who handles patent infringement for the agency, on this response. I believe your (Mike's) response to Optima is quite thorough and could very well diffuse this issue. I'm not sure a telecon at this time is warranted. I suggest we wait to see Optima's response.

Alan, do you have any additional thoughts?

-Ed

b(6)

Edward K. Fein
Deputy Chief Counsel/
Intellectual Property Counsel
NASA Johnson Space Center
████████████████
████████████████

████████████████
████████████████
████████████████

02627

From: Delgado, Francisco J. (JSC-ER2)
Sent: Monday, September 25, 2006 1:12 AM
To: Mike Abernathy; Fein, Edward K. (JSC-AL)
Subject: RE: Rapid Imaging Software, Inc. patent infringement

Please work with Mr. Fein on a time to call. I can 'sneak' away from any activity tomorrow to join a conference call.

thanks,

Frank

From: Mike Abernath███████████████████████   b(6)
Sent: Sun 9/24/2006 6:38 PM
To: Fein, Edward K. (JSC-AL); Delgado, Francisco J. (JSC-ER2)
Subject: Rapid Imaging Software, Inc. patent infringement

Gentlemen,

I strongly believe that these two patents are defective, but more important I feel strongly that NASA and RIS did not infringe either one of them, in spite of these accusations.

I would like to ask for your help urgently since these people are threatening to sue us and since they have falsely accused us of infringement.

I therefore would like to ask both of you to read my letter attached below which has been sent to Mr. Adams, to make sure that I am stating things properly. Would it be possible for me to call you tomorrow on the phone?

Mike Abernathy

Rapid Imaging Software, Inc.

From: Mike Abernathy█████████████████   b(6)
Sent: Sunday, September 24, 2006 5:29 PM
To: 'Robert Adams'
Subject: RE: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

02629

Dear Mr. Adams,

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

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More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

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We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed

5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

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Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

_____

From: Robert Adams
Sent: Tuesday, September 19, 2006 7:53 AM
To
Cc:
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

b(6)

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

_____

September 19, 2006

Michael F. Abernathy

Rapid Imaging Software, Inc.

Sent via US MAIL, FAX & EMAIL

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-CD08-47B5-A58D-A825698FD5EB&start=0&len=6480&src=&type=x&⬛⬛⬛⬛⬛⬛⬛m&cc=&bcc=&subject=&body=&curmbox=00000000-0000-0000-0000-000000000001&a=ad17460c4976d4c8a2dcf004b74ca88163cef3516fe0531abada331a64870d4⬛⬛⬛ to arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-

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02631

✉ RE: Rapid Imaging Software, Inc. patent infringement

From: Delgado, Francisco J. (JSC-ER2 ███████████████████████
To: Mike Abernath████████████████████ein, Edward K. (JSC-AL)
████████████
Date: Sep 25 2006 - 1:13am

Please work with Mr. Fein on a time to call. I can 'sneak' away from any activity tomorrow to join a conference call.

thanks,

Frank

b(6)

_____

From: Mike Abernathy [m█████████████████████
Sent: Sun 9/24/2006 6:38 PM
To: Fein, Edward K. (JSC-AL); Delgado, Francisco J. (JSC-ER2)
Subject: Rapid Imaging Software, Inc. patent infringement

Gentlemen,

I strongly believe that these two patents are defective, but more important I feel strongly that NASA and RIS did not infringe either one of them, in spite of these accusations.

I would like to ask for your help urgently since these people are threatening to sue us and since they have falsely accused us of infringement.

I therefore would like to ask both of you to read my letter attached below which has been sent to Mr. Adams, to make sure that I am stating things properly. Would it be possible for me to call you tomorrow on the phone?

Mike Abernathy

Rapid Imaging Software, Inc.

_____

From: Mike Abernathy [ma█████████████████
Sent: Sunday, September 24, 2006 5:29 PM
To: 'Robert Adams'
Subject: RE: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

Dear Mr. Adams,

I have just returned from business travel, and have not had a chance to look over your communications in detail. Thank you very much for bringing your concerns to our attention. Let me assure you that we will do everything in our power, now

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and in the future, to avoid infringement of these or any patents. We have already begun another careful analysis of them and will act swiftly upon what we learn, should any problems be found. We have been aware of these patents for some years and have not ever infringed upon them, and will not do so. When we first learned of them we carefully examined our activities and those of our customers to make sure there was no possible infringement of them. As soon as we learned of it, we also informed the legal departs of our major customers to alert them to the existence of USP 5,904,724, but so far no UAV manufacturers have been seriously interested in offering synthetic vision for their UAV pilot stations.

We discovered that the system described the in patent pertaining to remotely piloted vehicles USP 5,904,724 contains an entire clause in claim 1 that did not exist in the X38 or other UAVs that we have seen – this is the final paragraph of clause 1 regarding the method for handling delay in the control loop by "adjusting control sensitivity". This simply is not present in any form in any vehicles with which we have experience. Since all claims of this patent include this clause by reference, that patent is not relevant to these vehicles because none of them have this feature.

More important however, is that all UAV control systems with which we are familiar require a device called an autopilot which is not contemplated at all in the subject patent. This device is similar to ones in modern manned aircraft, but it is used to control the aircraft flight in the pitch, heading, and roll axes. On UAVs, the communications delay is not handled by determining the delay and adjusting the control sensitivity as Margolin prescribes. Instead, an autopilot is installed onboard the aircraft where it senses changes in pitch, heading, and roll locally on board the aircraft. The pilot still makes control inputs to fly the airplane, but only via the autopilot on board the aircraft. The autopilot corrects attitude drift instantaneously avoiding the problem of substantial communication delays, and allows the pilot to control the vehicle in a more stable manner.

Most important, the autopilot is absolutely required to deal with the frequent communications outages which occur between the UAV and the ground control segment (This can be anywhere from a second to an hour in length, generally). In the system of Margolin, a communications outage would often result in the loss of the aircraft, because the pilot would be unable to correct attitude drift during communication link loss and the air vehicle would go out of control and could crash. In the last decade of working with UAVs never have I witnessed a flight in which the communication link was not lost at least once during the flight. If the control communication link goes down, no control inputs can be made to the aircraft from the pilot on the ground, but the autopilot keeps the airplane from crashing by flying straight and level or gently banking until the link is restored. The system of Margolin does not recognize the problem of link loss, and fails to offer any solution. The autopilot functionality can be located in various components in the X38 it was in the on board GNC (Guidance Navigation and Control) computer, as I recollect.

There is another on-board component called a SAS or Stability Augmentation System found on most large modern UAVs such as Predator, and which performs additional real-time stabilization to that done by the autopilot. Again, the SAS is not contemplated by the Margolin patent, yet is required to dampen control system oscillations in order to safely operate a UAV in systems that may suffer from communications delays to remote user control inputs. There are many more differences that we found when we first examined it, but as you can see we have never worked with a vehicle upon which your system could have been implemented and safely flown, and therefore we realized that it is impossible for us to have infringed this patent 5,904,724. You may easily independently verify the fact of these profound and fundamental differences from your system by examining the printed published materials regarding UAV control system and NASAs many publications on X-38 control systems.

We have never allowed our software to be used as an aid in piloting manned aircraft and thus cannot have infringed 5,566,073. If you aware of anyone doing this with our software, kindly inform us immediately, and we will ask them to desist.

Finally, let me set your mind at ease by informing you that our software product license currently explicitly contains the following clause: "The user is prohibited from using this software to pilot manned or unmanned aircraft." Alas, the

02633

requirements of our current company insurance policy, combined with the profound lack of a market for this possible application of our technology facilitated this business decision. Your letter said we recognize the "value" of this technology, but in view of the current situation "lack of value" is probably more appropriate.

We will get back to you just as soon as we have had a chance to study these patent claims further. For now, is there anything else that our company can reasonably do in regard to the concern that you expressed?

Sincerely,

Mike Abernathy

Rapid Imaging Software, Inc.

From: Robert Adams [mailt█████████████████████████
Sent: Tuesday, September 19, 2006 7:53 AM
T█████████████████
C█████████████
Subject: [Norton AntiSpam] Rapid Imaging Software, Inc. patent infringement

b(6)

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

September 19, 2006

Michael F. Abernathy

Rapid Imaging Software, Inc.

████████████████
████████████████

b(6)

Mr. Abernathy,

It has come to our attention that your company provides Synthetic Vision to fly UAV both in real time and in simulation.

I am sure that Mr. Francisco Delgado of NASA and your other clients would agree with your company having a proper license of our intellectual property.

Hence as a legal formality, we are inviting your company to license our technology seeing that your company is already commercially using and selling said technology as covered by our IP listed below:

United States Patent 5,566,073 Margolin October 15, 1996 Pilot aid using a synthetic environment

United States Patent 5,904,724 Margolin May 18, 1999, Method and apparatus for remotely piloting an aircraft

We are pleased that you recognize the value of using Synthetic Vision to allow UAV's to See-and-Avoid other aircraft; this is covered by our patents as noted above.

Please contact us so that we can a proper legal license with our attorneys for your use of our technology and/or you may contact our attorneys (HYPERLINK "http://by106fd.bay106.hotmail.msn.com/cgi-bin/compose?mailto=1&msg=0BE8FF07-CD08-47B5-A58D-A825698FD5EB&start=0&len=6480&src=&type=x&███████████████cc=&bcc=&subject=&body=&curmbox=00000000-0000-0000-0000-000000000001&a=ad17460c4976d4c8a2dcf004b74ca88163cef3516fe0531abada331a64870d4█████████ to arrange a proper license of said intellectual property. You have 15 days to do so.

Sincerely,

Robert Adams, CEO

Optima Technology Group

RA/cp

-enclosure links-
~~~

✉ **RE: US Patents 5566073 and 5904724**

From: FEIN, EDWARD K. (JSC-HA) (NASA)█████████████████
To: Barry V. Gibbens, LaRC ████████████████████
CC: Linda B. Blackburn ████████████████
Date: Sep 01 2004 - 4:33pm

b(6)

02635

Rats! I guess I'd should research things better before I blindly send them out. Btw, the real Bahamas get hurricanes too.

-----Original Message-----
From: Barry V. Gibbens, LaRC [mailt█████████████████]
Sent: Wednesday, September 01, 2004 3:26 PM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Cc: Linda B. Blackburn
Subject: RE: US Patents 5566073 and 5904724

b(6)

Very nice! I went to the Nassau Bay website, and looked under "New Things . . . Check It Out." Three of the highlights were "Storm Preparedness Information," "Hurricane Tracking Chart," and "You Can Now Pay Traffic Fines On Line." Sounds like my kind of place!!!

BG

At 02:44 PM 9/1/2004 -0500, you wrote:

No need to telecommute from the Bahamas, Barry. Nassau Bay is right across the street from JSC! Check out http://www.nassaubay.com/. See -- we got it all! And please do pass the word. I'd even risk the wrath of Linda and Kathy to snag one of you guys.

Take care ...

b(5)

-Ed

-----Original Message-----
From: Barry V. Gibbens, LaRC [mailto:█████████████]
Sent: Wednesday, September 01, 2004 2:21 PM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Subject: RE: US Patents 5566073 and 5904724

b(6)

Thanks Ed - I'll pass the word. Just for future reference, if any of us were to apply for the job, how would you feel about tele-commuting from, say, the Bahamas?????

b(5)

At 12:30 PM 9/1/2004 -0500, you wrote:

b(5)

Thanks Barry ...

Best regards ...

-Ed

Btw, Jim Cate is retiring at the end of the month, and we definitely will be filling the slot. So please spread the word. Good things about JSC is the high locality pay differential in Houston, and the relatively low cost of living here. The downside is that the poor person will have to deal with my bad a** on a daily basis.

Take care ...
-----Original Message-----
From: Barry V. Gibbens, LaRC ███████████████████████████   **b(6)**
Sent: Wednesday, September 01, 2004 11:29 AM
To: Mike Abernathy; 'Kennedy, Alan'
Cc: Linda B. Blackburn; Dan Baize; 'Trey Arthur'; DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA); FEIN, EDWARD K. (JSC-HA) (NASA); BOE, ERIC A., LTCOL. (JSC-CB) (NASA)
Subject: Re: US Patents 5566073 and 5904724

Hi Alan (and others),
Just to clarify the message below, I spoke with Mike Abernathy this morning, and I've spoken with Dan Baize on a number of occasions concerning this topic. I've also spoken with you (Alan) briefly, and with Linda Blackburn, Patent Counsel here at Langley (not Linda "Blackwell" :-). It seems clear that the technical folks have determined that the Margolin patent on Synthetic Vision creates a substantial problem for many of our partners in the aviation safety industry for a variety of reasons. It also seems clear that there is substantial prior art in existence to make an argument for re-examination of the Margolin patent. Linda has stated that we at Langley are willing to support an analysis of this situation at the Center level. She has, however, also told me that we first need to perform a formal infringement analysis to confirm (from a legal perspective) that we are in fact practicing the patent as described by its claims. If that analysis shows probable infringement, then we can proceed with a re-examination request, which Dan Baize has indicated he would be willing to fund. It is my understanding that you (again Alan) gave your blessing this morning for us to proceed at the Center level on these activities. If that is the case, I'll go ahead and begin moving on the formal infringement analysis, keeping you apprised of progress as it develops. Please let me know if you are in agreement with the situation as I have described it. If so, I'll begin work here shortly.
Thanks,
Barry

At 09:33 AM 9/1/2004 -0600, Mike Abernathy wrote:

Good Morning Alan,
Per our discussions this morning I called both Dan Baize and Barry Gibbens at Langley to discuss the resolution of questions surrounding patents 5566073 and 5904724. When we spoke earlier you indicated that based on the evidence of prior art uncovered so far, that NASA might move for an Ex-Parte re-examination of patent 5566073, provided that NASA patent counsel at LARC concurs. Mr. Baize feels that this patent may invalid because of copious prior art, and that it is therefore a significant impediment to the development of life-saving synthetic vision technologies. Mr. Gibbens has indicated that he and Ms. Blackwell feel it is now appropriate to for NASA LARC to proceed to request a re-examination. We will therefore forward them the same information on prior art that I forwarded to HQ. Please let us know how we can continue to be of help.
Best regards,
Mike Abernathy
Rapid Imaging Software, Inc.
███████████   **b(6)**
HYPERLINK "http://www.visualflight.com/"www.visualflight.com

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02637

Barry V. Gibbens
NASA Langley Research Center
Intellectual Property Law Team - Office of Chief Counsel

b(6)

wwwebsite: http://tech-transfer.larc.nasa.gov/

NEW E-MAIL ADDRESS: Please note that effective immediately, my e-mail address is now ▮▮▮▮▮▮▮▮▮
Please update your mail systems accordingly. Thanks.

Barry V. Gibbens
NASA Langley Research Center
Intellectual Property Law Team - Office of Chief Counsel

b(6)

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✉ **RE: US Patents 5566073 and 5904724**

b(6)

From: FEIN, EDWARD K. (JSC-HA) (NASA) ▮▮▮▮▮▮▮
To: Barry V. Gibbens, LaRC ▮▮▮▮▮▮▮▮
BCC: ROAN, BERNARD J. (JSC-AL) (NASA) ▮▮▮▮▮▮▮
Date: Sep 01 2004 - 2:44pm

02638

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b(5)

Take care ...

-Ed

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From: Barry V. Gibbens, LaRC [mailto:Barry.V.Gibbens@NASA.GOV]
Sent: Wednesday, September 01, 2004 2:21 PM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Subject: RE: US Patents 5566073 and 5904724

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b(5)

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b(5)

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Take care ...

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From: Barry V. Gibbens, LaRC
Sent: Wednesday, September 01, 2004 11:29 AM

b(6)

To: Mike Abernathy; 'Kennedy, Alan'
Cc: Linda B. Blackburn; Dan Baize; 'Trey Arthur'; DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA); FEIN, EDWARD K. (JSC-HA) (NASA); BOE, ERIC A., LTCOL. (JSC-CB) (NASA)
Subject: Re: US Patents 5566073 and 5904724

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44

02633

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Barry

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Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.
█████████████

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Barry V. Gibbens
NASA Langley Research Center
Intellectual Property Law Team - Office of Chief Counsel
██████████████████
█████████████████1

b(6)

██████████████
█████████████
wwwebsite: http://tech-transfer.larc.nasa.gov/

NEW E-MAIL ADDRESS: Please note that effective immediately, my e-mail address is now████████████████

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Please update your mail systems accordingly. Thanks.

Barry V. Gibbens
NASA Langley Research Center
Intellectual Property Law Team - Office of Chief Counsel
███████████████████

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██████████████████ 0
███████████████████████

wwwebsite: http://tech-transfer.larc.nasa.gov/

b(6)

NEW E-MAIL ADDRESS: Please note that effective immediately, my e-mail address is no ████████████████████.
Please update your mail systems accordingly. Thanks.

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✉ **FW: US Patents 5566073 and 5904724**

b(6)

From: FEIN, EDWARD K. (JSC-HA) (NASA ████████████████████
To: RO, THEODORE U., JD (JSC-HA) (NASA ████████████v>, CATE, JAMES M.,
JD (JSC-HA) (NASA) ◄████████████████
CC: KRISHEN, KUMAR (JSC-HA) (NASA) ████████████, WHITTINGTON,
JAMES (JSC-HA) (USA) ◄█████████████HAINES, DAVID D. (JSC-HA)
(NASA) █████████████, RIEGER, COLLIN (JSC-HA) (UNK)
████████████████LANE, HELEN W. (JSC-AD) (NASA)█████████████@nasa.gov>,
HAYES, GREG W. (JSC-AD) (NASA)████████████████ROAN, BERNARD J. (JSC
AL) (NASA) ◄██████████████, REMINGTON, DANIEL R. (DAN) (JSC-AL) (NASA)
██████████████v>
Date: Sep 01 2004 - 12.31pm

📎 Claims Analysis of Patent.doc - 2.1MB - View in Outlook

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██

-Ed

b(5)

-----Original Message-----
From: Mike Abernath ████████████████████
Sent: Wednesday, September 01, 2004 12.25 PM ███
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Subject: RE: US Patents 5566073 and 5904724

Here it is.

Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.

02641

(505) 265 7020

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-----Original Message-----
From: FEIN, EDWARD K. (JSC-HA) (NASA) ████████████████████ b(6)
Sent: Wednesday, September 01, 2004 11:19 AM
To: 'Mike Abernathy'
Subject: RE: US Patents 5566073 and 5904724

Barry Gibbens is a good man, Mike, and no, you haven't sent me the claims analysis. I am pleased to learn that the Agency is moving on this.

-Ed
-----Original Message-----
From: Mike Abernathy ████████████████ b(6)
Sent: Wednesday, September 01, 2004 11:45 AM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Cc: DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA)
Subject: RE: US Patents 5566073 and 5904724
Hi Ed,

Happy to keep you involved. I appreciated that article you sent me on the topic. The one thing that concerned me in the article is that I realized if Alan just sends the claims analysis to the PTO without requesting a re-exam then the owner will have the leisure to think up excuses for why this is not so, and prepare a defense maybe even ask for his own re-exam. Yikes! If NASA does not ask for the re-exam upon finding the prior art, we are basically strengthening his position to sue NASA by allowing him the time to synthesize a defense against the defects of his patent. It appears that Barry Gibbens is ready to press forward, happily.

Have I sent you the claims analysis yet?

Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.
████████████████

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www.visualflight.com

-----Original Message-----
From: FEIN, EDWARD K. (JSC-HA) (NASA ████████████████████ b(6)
Sent: Wednesday, September 01, 2004 10:06 AM
To: 'Mike Abernathy'
Subject: RE: US Patents 5566073 and 5904724

Thanks, Mike, for keeping me in the loop.

-Ed
-----Original Message-----
From: Mike Abernathy ████████████████
Sent: Wednesday, September 01, 2004 10:33 AM
To: 'Kennedy, Alan'
Cc: 'Barry V. Gibbens, LaRC'; Dan Baize; 'Trey Arthur'; DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA); FEIN, EDWARD K. (JSC-HA) (NASA); BOE, ERIC A., LTCOL. (JSC-CB) (NASA)
Subject: US Patents 5566073 and 5904724
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47   0264?

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Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.
███████████

~~~

b(6)

✉ RE: US Patents 5566073 and 5904724

From: Mike Abernathy ███████████████████
To: 'FEIN, EDWARD K. (JSC-HA) (NASA)' ████████████████
Date: Sep 01 2004 - 12:44pm

Sir,

Could you read this and let me know what you think of it? I know it will evolve a lot in Barry's hands – which is good. But I would like your thoughts on it for my own and Frank's edification.

Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.
███████████

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www.visualflight.com

-----Original Message-----
From: FEIN, EDWARD K. (JSC-HA) (NASA)████████████████
Sent: Wednesday, September 01, 2004 11:41 AM
To: 'Mike Abernathy'
Subject: RE: US Patents 5566073 and 5904724

thanks!
-----Original Message-----
From: Mike Abernathy████████████████
Sent: Wednesday, September 01, 2004 12:25 PM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Subject: RE: US Patents 5566073 and 5904724
Here it is.

Best regards,

b(6)

Mike Abernathy
Rapid Imaging Software, Inc.
███████████

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www.visualflight.com

-----Original Message-----
From: FEIN, EDWARD K. (JSC-HA) (NAS)████████████████

02643

48

Sent: Wednesday, September 01, 2004 11:19 AM
To: 'Mike Abernathy'
Subject: RE: US Patents 5566073 and 5904724

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-Ed
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From: Mike Abernathy ~~███████████████~~ *b(6)*
Sent: Wednesday, September 01, 2004 11:45 AM
To: FEIN, EDWARD K. (JSC-HA) (NASA)
Cc: DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA)
Subject: RE: US Patents 5566073 and 5904724
Hi Ed,

Happy to keep you involved. I appreciated that article you sent me on the topic. The one thing that concerned me in the article is that I realized if Alan just sends the claims analysis to the PTO without requesting a re-exam then the owner will have the leisure to think up excuses for why this is not so, and prepare a defense maybe even ask for his own re-exam. Yikes! If NASA does not ask for the re-exam upon finding the prior art, we are basically strengthening his position to sue NASA by allowing him the time to synthesize a defense against the defects of his patent. It appears that Barry Gibbens is ready to press forward, happily.

Have I sent you the claims analysis yet?

Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.
~~███████████████~~

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-----Original Message-----
From: FEIN, EDWARD K. (JSC-HA) (NASA) ~~███████████████~~
Sent: Wednesday, September 01, 2004 10:06 AM
To: 'Mike Abernathy'
Subject: RE: US Patents 5566073 and 5904724

Thanks, Mike, for keeping me in the loop.   *b(6)*

-Ed
-----Original Message-----
From: Mike Abernathy ~~███████████████~~
Sent: Wednesday, September 01, 2004 10:33 AM
To: 'Kennedy, Alan'
Cc: 'Barry V. Gibbens, LaRC'; Dan Baize; 'Trey Arthur'; DELGADO, FRANCISCO J. (FRANK) (JSC-ER2) (NASA); FEIN, EDWARD K. (JSC-HA) (NASA); BOE, ERIC A., LTCOL. (JSC-CB) (NASA)
Subject: US Patents 5566073 and 5904724
Good Morning Alan,

Per our discussions this morning I called both Dan Baize and Barry Gibbens at Langley to discuss the resolution of questions surrounding patents 5566073 and 5904724. When we spoke earlier you indicated that based on the evidence of prior art uncovered so far, that NASA might move for an Ex-Parte re-examination of patent 5566073, provided that NASA patent counsel at LARC concurs. Mr. Baize feels that this patent may invalid because of copious prior art, and that it is therefore a significant impediment to the development of life-saving synthetic vision technologies. Mr. Gibbens has indicated that he and Ms. Blackwell feel it is now appropriate to for NASA LARC to proceed to request a re-examination. We will therefore forward them the same information on prior art that I forwarded to HQ. Please let us know how we can continue to be of help.

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Best regards,

Mike Abernathy
Rapid Imaging Software, Inc.

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Claims Analysis of
Patent.doc
~~~

✉ Re: US Patents 5566073 and 5904724

From: Barry V. Gibbens, LaR▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮>
To: Mike Abernathy▮▮▮▮▮▮ 'Kennedy, Alan'▮▮▮▮▮▮▮▮▮▮▮▮>
CC: Linda B. Blackbur▮▮▮▮ Dan Baize▮▮▮▮▮▮▮▮▮
'Trey Arthur'▮▮▮▮▮▮▮▮▮▮>, DELGADO FRANCISCO J. (FRANK)▮▮▮▮▮,
▮▮▮▮ FEIN, EDWARD K. (JSC-HA) (NASA)
▮▮▮▮▮ Eric Boe▮▮▮▮▮▮▮▮▮▮
Date: Sep 01 2004 - 11:29am

b(6)

Hi Alan (and others),
Just to clarify the message below, I spoke with Mike Abernathy this morning, and I've spoken with Dan Baize on a number of occasions concerning this topic. I've also spoken with you (Alan) briefly, and with Linda Blackburn, Patent Counsel here at Langley (not Linda "Blackwell" :-). It seems clear that the technical folks have determined that the Margolin patent on Synthetic Vision creates a substantial problem for many of our partners in the aviation safety industry for a variety of reasons. It also seems clear that there is substantial prior art in existence to make an argument for re-examination of the Margolin patent. Linda has stated that we at Langley are willing to support an analysis of this situation at the Center level. She has, however, also told me that we first need to perform a formal infringement analysis to confirm (from a legal perspective) that we are in fact practicing the patent as described by its claims. If that analysis shows probable infringement, then we can proceed with a re-examination request, which Dan Baize has indicated he would be willing to fund. It is my understanding that you (again Alan) gave your blessing this morning for us to proceed at the Center level on these activities. If that is the case, I'll go ahead and begin moving on the formal infringement analysis, keeping you apprised of progress as it develops. Please let me know if you are in agreement with the situation as I have described it. If so, I'll begin work here shortly.
Thanks,
Barry

At 09:33 AM 9/1/2004 -0600, Mike Abernathy wrote:

Good Morning Alan,

Per our discussions this morning I called both Dan Baize and Barry Gibbens at Langley to discuss the resolution of questions surrounding patents 5566073 and 5904724. When we spoke earlier you indicated that based on the evidence of prior art uncovered so far, that NASA might move for an Ex-Parte re-examination of patent 5566073, provided that NASA patent counsel at LARC concurs. Mr. Baize feels that this patent may invalid because of copious prior art, and that it is therefore a significant impediment to the development of life-saving synthetic vision technologies. Mr. Gibbens has indicated that he and Ms. Blackwell feel it is now appropriate to for NASA LARC to proceed to request a re-examination.

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We will therefore forward them the same information on prior art that I forwarded to HQ. Please let us know how we can continue to be of help.

Best regards,

Mike Abernathy

Rapid Imaging Software, Inc.

██████████

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HYPERLINK "http://www.visualflight.com/"www.visualflight.com

Barry V. Gibbens
NASA Langley Research Center
Intellectual Property Law Team - Office of Chief Counsel
████████████████

██████████1
████████90████████

wwwebsite: http://tech-transfer.larc.nasa.gov/

NEW E-MAIL ADDRESS: Please note that effective immediately, my e-mail address is no████████████████.
Please update your mail systems accordingly. Thanks.

From: McNutt, Jan (HQ-MC000)
Sent: Wednesday, August 06, 2008 1:36 PM

51

02646

To: Fein, Edward K. (JSC-AL)
Cc: Borda, Gary G. (HQ-MC000); Rotella, Robert F. (HQ-MA000)
Subject: Patent Infringement claim from Jed Margolin; NASA Case No. I-222

Hello Mr. Fein,

I am a new attorney working commercial law and also helping out Gary and Bob. Do you remember working on this infringement claim, and if so, what was the outcome, if any? See attached.

<< File: Kennedy to JSC.pdf >> << File: Margolin FOIA.pdf >> << File: Letter from Optima 20080714.pdf >>

Thank you,

Jan S. McNutt
Attorney-Advisor (Commercial)
Office of the General Counsel
NASA Headquarters

b(6)

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