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**SUMMIT**

# The Challenge of Patent Trolls -- How to Contribute Prior Art

Adam Avrunin, Chief Patent Counsel, Red Hat  
John Alemanni, Partner, Kilpatrick Stockton  
Keith Bergelt, CEO, Open Invention Network

September 4, 2009

presented by



# Introduction: Patent Aggressors

- Operating Companies: traditional plaintiffs
- Nonpracticing Entities (“NPEs”): rising threat
  - purchase and enforce patents
  - do not practice the technology covered by the patent
  - do not have any business other than patent litigation
  - also known as “patent trolls”

# Introduction: Problematic Software Patents

- Overbroad patents
- Noninventive patents

## Reasons:

- too many applications, too little time for examination
- difficulty in finding software prior art

RESULT: OPEN-SOURCE SOFTWARE CAN BE A TARGET!

# Cost of Patent Litigation (Monetary)

- Attorney Fees = \$3M - \$7M depending on amount at risk (per side)
- Actual Damages: reasonable royalty to patentee or his lost profits
- Enhanced Damages: 3 times actual damages and other side's attorney fees, if infringement is willful
- Injunction: no more shipment of infringing product!

# Mechanisms for Challenging Patent Validity

- Reexamination
- Litigation

# Finding the Prior-Art Ammunition to Challenge Patent Validity

You can help fight the danger to open-source software from overbroad patents!

# Agenda

Patents and What They Look Like

Prior Art: Definition and Explanation

Finding Prior Art

Open Invention Network

Linux Defender and Its Public Invitation to Help Challenge  
Patents of Interest to the Open-Source Community

# What Does a Patent Look Like? Cover Page



US007181427B1

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

(10) **Patent No.:** **US 7,181,427 B1**  
(45) **Date of Patent:** **Feb. 20, 2007**

(54) **AUTOMATED CREDIT APPLICATION SYSTEM**

(75) Inventors: **James R. DeFrancesco**, Columbia, MD (US); **Scott L. Freiman**, Potomac, MD (US); **James C. Alsobrook, Jr.**, Lutherville, MD (US); **Steven M. Terpening**, Laurel, MD (US); **Andrew L. Mayers**, Glyndon, MD (US); **Edward T. Mullin**, Hampstead, MD (US); **Brian S. Fritsche**, Columbia, MD (US); **Michael C. DiClaudio**, Baltimore, MD (US); **Michael D. Brune, Jr.**, Timonium, MD (US); **Kristie W. Scott**, Elkridge, MD (US)

4,600,828 A	7/1986	Nogami et al.	235/379
4,642,768 A	2/1987	Roberts	364/408
4,646,250 A	2/1987	Childress	364/518
4,648,037 A	3/1987	Valentino	364/408
4,649,037 A	3/1987	Marsh et al.	
4,649,832 A	3/1987	Hain et al.	109/24.1
4,675,815 A	6/1987	Kuroki et al.	379/37
4,683,536 A	7/1987	Yamamoto	364/408
4,722,055 A	1/1988	Roberts	364/408
4,730,252 A	3/1988	Bradshaw	364/403

(Continued)

**FOREIGN PATENT DOCUMENTS**

(73) Assignee: **JP Morgan Chase Bank, N.A.**, Houston, TX (US)

EP 0 774 725 A2 5/1997

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

(Continued)

**OTHER PUBLICATIONS**

(21) Appl. No.: **08/922,462**

(22) Filed: **Sep. 3, 1997**

"Re-Engineering Update: Where Banks are Going to Fit Along the Information Highway," American Banker, p. 7, vol. 159, No. 98, Apr. 1994.\*

(Continued)

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 08/526,776, filed on Sep. 12, 1995, now Pat. No. 5,878,403.

(51) **Int. Cl.**  
**G06Q 40/00** (2006.01)

(52) **U.S. Cl.** ..... **705/38; 705/35; 705/36; 705/37; 705/39**

(58) **Field of Classification Search** ..... **705/38, 705/32, 35, 39, 36, 37, 26, 27, 14, 1**  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,970,992 A	7/1976	Boothroyd et al.	340/172.5
4,017,835 A	4/1977	Randolph	340/152 R
4,491,725 A	1/1985	Pritchard	235/375

*Primary Examiner*—Nga Nguyen  
(74) *Attorney, Agent, or Firm*—Goodwin Procter, LLP

(57) **ABSTRACT**

A computer based credit application processing system provides a graphical user interface, automatic software update downloading, lender to lender routing of credit applications, and integration with in-house finance and insurance systems and third party data entry facilities, among other features. Web site linkage is also accommodated.

**8 Claims, 21 Drawing Sheets**



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Patent # and Date



US007181427B1

Title

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**DeFrancesco et al.**

(10) **Patent No.: US 7,181,427 B1**  
(45) **Date of Patent: Feb. 20, 2007**

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(54) **AUTOMATED CREDIT APPLICATION SYSTEM**

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Owner

(73) Assignee: **JP Morgan Chase Bank, N.A.**, Houston, TX (US)

(Continued)  
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EP 0 774 725 A2 5/1997

Filing Date

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Abstract

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(51) **Int. Cl.**  
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(Continued)  
*Primary Examiner*—Nga Nguyen  
(74) *Attorney, Agent, or Firm*—Goodwin Procter, LLP

(57) **ABSTRACT**  
A computer based credit application processing system provides a graphical user interface, automatic software update downloading, lender to lender routing of credit applications, and integration with in-house finance and insurance systems and third party data entry facilities, among other features. Web site linkage is also accommodated.

**8 Claims, 21 Drawing Sheets**

# What Does a Patent Look Like? Figures

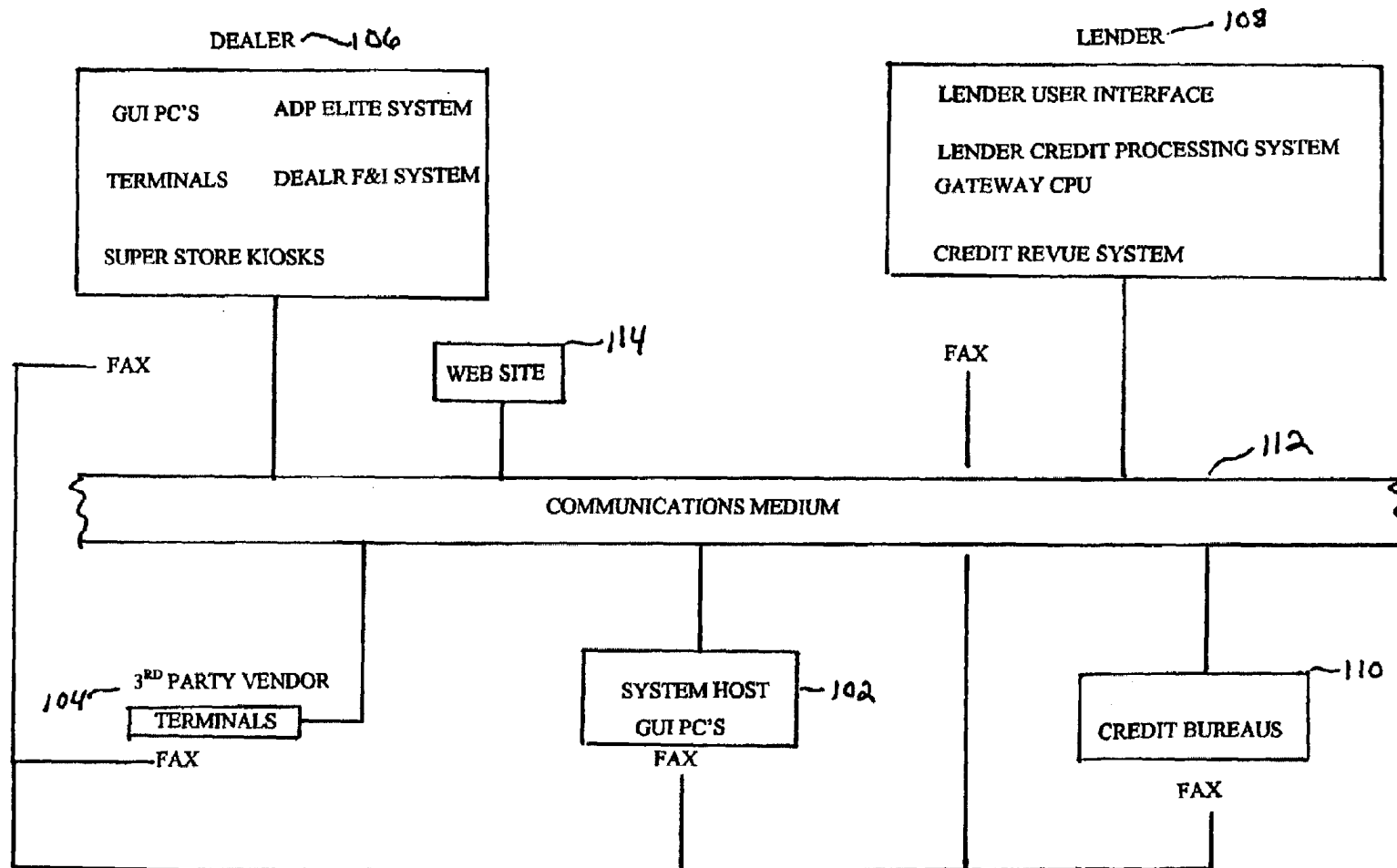
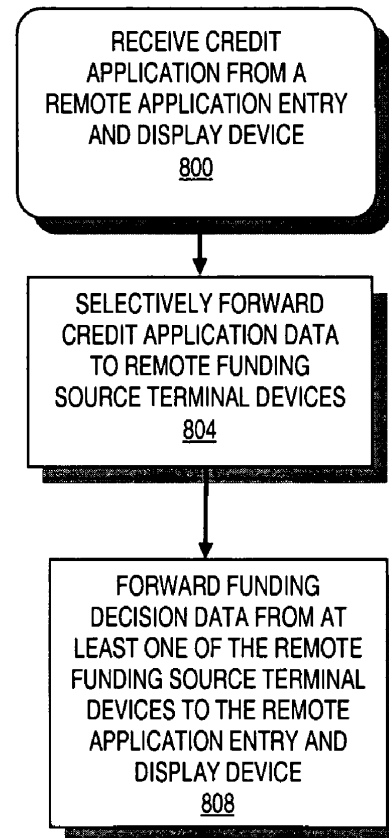


FIG. 1

# What Does a Patent Look Like? Figures

FIG. 8A



# What Does a Patent Look Like? Specification

1

## AUTOMATED CREDIT APPLICATION SYSTEM

### CROSS REFERENCE TO RELATED PATENT APPLICATION

This application is a continuation-in-part application of Ser. No. 08/526,776 filed Sep. 12, 1995, now U.S. Pat. No. 5,878,403, entitled "COMPUTER IMPLEMENTED AUTOMATED CREDIT APPLICATION ANALYSIS AND DECISION ROUTING SYSTEM" the subject matter of which is hereby incorporated by reference in its entirety. The benefit of the filing date of the above copending application is claimed herein.

### BACKGROUND OF THE INVENTION

#### 1. Field of the Invention

The invention relates to the technical field of data processing, and more particularly to an enhanced computer implemented credit application analysis and decision routing system.

#### 2. Background Information

Before the invention of the subject matter of the above-referenced related co-pending application, obtaining credit and financing of a major consumer purchase had been done manually. Typically, an applicant filled out a credit (loan) application by hand. The process is fully described in the co-pending application, and therefore will not be repeated here.

Certain aspects of the prior loan application process had been automated to a limited extent, for example, according to Jones et al. (U.S. Pat. No. 5,239,462) and Dykstra et al. (U.S. Pat. No. 5,611,052). However, these disclosed systems have somewhat limited functionality in processing loan applications.

The related co-pending application describes a comprehensive automation of the whole credit application process to provide flexibility and functionality in the management of the credit application process. Additional functionality, improvements to the system functionality described in the co-pending application, and aspects of the invention previously fully disclosed but for which additional protection is desired, are therefore the subject of this application.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The invention will now be described in more detail by way of example with reference to the embodiments shown in the accompanying figures. It should be kept in mind that the following described embodiments are only presented by way of example and should not be construed as limiting the inventive concept to any particular physical configuration.

With reference to FIG. 1, the third party fax connection, or simply "Fax Connection," aspect of the invention will now be described. The Fig. shows that the host **102** is connected to various users, the third party vendor **104**, the dealer **106**, the lender **108** and the credit bureaus **110**, through a communications medium **112**. This medium **112** could include leased lines, telephone lines, local and wide area networks, the Internet, etc., as would be apparent to one skilled in the art, so long as the medium can support the volume and speed of data transmission traffic to meet design requirements.

# What Does a Patent Look Like? Specification

<p style="text-align: center;"><b>I</b></p> <p style="text-align: center;"><b>AUTOMATED CREDIT APPLICATION SYSTEM</b></p>
<p style="text-align: center;">CROSS REFERENCE TO RELATED PATENT APPLICATION</p> <p>This application is a continuation-in-part application of Ser. No. 08/526,776 filed Sep. 12, 1995, now U.S. Pat. No. 5,878,403, entitled "COMPUTER IMPLEMENTED AUTOMATED CREDIT APPLICATION ANALYSIS AND DECISION ROUTING SYSTEM" the subject matter of which is hereby incorporated by reference in its entirety. The benefit of the filing date of the above copending application is claimed herein.</p>
<p style="text-align: center;">BACKGROUND OF THE INVENTION</p> <p>1. Field of the Invention</p> <p>The invention relates to the technical field of data processing, and more particularly to an enhanced computer implemented credit application analysis and decision routing system.</p> <p>2. Background Information</p> <p>Before the invention of the subject matter of the above-referenced related co-pending application, obtaining credit and financing of a major consumer purchase had been done manually. Typically, an applicant filled out a credit (loan) application by hand. The process is fully described in the co-pending application, and therefore will not be repeated here.</p> <p>Certain aspects of the prior loan application process had been automated to a limited extent, for example, according to Jones et al. (U.S. Pat. No. 5,239,462) and Dykstra et al. (U.S. Pat. No. 5,611,052). However, these disclosed systems have somewhat limited functionality in processing loan applications.</p> <p>The related co-pending application describes a comprehensive automation of the whole credit application process to provide flexibility and functionality in the management of the credit application process. Additional functionality, improvements to the system functionality described in the co-pending application, and aspects of the invention previously fully disclosed but for which additional protection is desired, are therefore the subject of this application.</p>

Related Applications

Background

Detailed Description

## DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

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# What Does a Patent Look Like? Claims

What is claimed is:

1. A computer aided method of managing a credit application, the method comprising the steps of:
  - receiving credit application data from a remote application entry and display device;
  - selectively forwarding the credit application data to remote funding source terminal devices;
  - forwarding funding decision data from at least one of the remote funding source terminal devices to the remote application entry and display device;
  - wherein the selectively forwarding the credit application data step further comprises:
    - sending at least a portion of a credit application to more than one of said remote funding sources substantially at the same time;
    - sending at least a portion of a credit application to more than one of said remote funding sources sequentially until a finding source returns a positive funding decision;
    - sending at least a portion of a credit application to a first one of said remote funding sources, and then, after a predetermined time, sending to at least one other remote funding source, until one of the finding sources returns a positive funding decision or until all funding sources have been exhausted; or;
    - sending the credit application from a first remote funding source to a second remote finding source if the first funding source declines to approve the credit application.

# What Does a Patent Look Like? Claims

1. A computer aided method of managing a credit application, the method comprising the steps of:

- receiving credit application data from a remote application entry and display device;
- selectively forwarding the credit application data to remote funding source terminal devices;
- forwarding funding decision data from at least one of the remote funding source terminal devices to the remote application entry and display device;
- wherein the selectively forwarding the credit application data step further comprises:
  - sending at least a portion of a credit application to more than one of said remote funding sources substantially at the same time;
  - sending at least a portion of a credit application to more than one of said remote funding sources sequentially until a finding source returns a positive funding decision;
  - sending at least a portion of a credit application to a first one of said remote funding sources, and then, after a predetermined time, sending to at least one other remote funding source, until one of the finding sources returns a positive funding decision or until all funding sources have been exhausted; or;
  - sending the credit application from a first remote funding source to a second remote finding source if the first funding source declines to approve the credit application.

# Independent vs. Dependent Claims

A dependent claim refers to another claim and includes all the limitations of that other claim plus additional limitations



An asymmetry exists:

- an accused infringer must invalidate every asserted claim
- but a patent owner must only prove that one claim is infringed

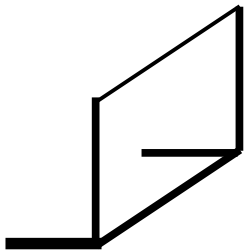
# Requirements for a Patent: The Statute

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

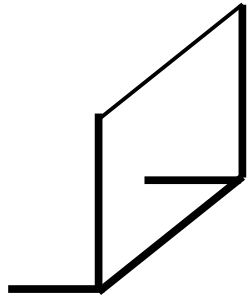
35 U.S.C. § 101

# Requirements for a Patent

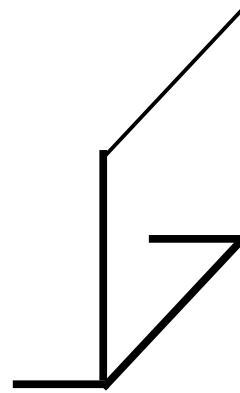
Subject Matter



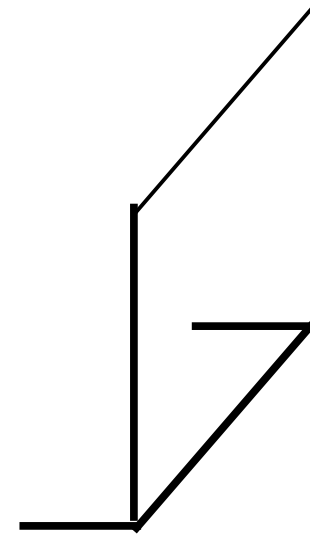
Clearly Described  
And Enabled



New



Not Obvious



A Series of Hurdles

# Definition of Prior Art

- Prior - before the creation of the invention
- Public Information
  - Patents
  - Publications
  - Conference Papers
  - Manuals
  - Products
  - Etc.
- Teaches the invention as claimed

# One Year Grace Period for Filing in the U.S.

The best prior art is more than a year before the effective filing date on the cover page of the patent.

# Invalidity: Anticipation

Anticipation = one reference that shows everything

Statute:

A person shall be entitled to a patent unless -

(a) the invention was **known or used by others** in this country, **or patented or described in a printed publication** in this or a foreign country, **before the invention** thereof by the applicant for patent, or

(b) the invention was **patented or described in a printed publication** in this or a foreign country **or in public use or on sale** in this country, **more than one year** prior to the date of the application for patent in the United States....

35 U.S.C. § 102

# Invalidity: Obviousness

Obviousness =  
a combination of references that show everything

Need a motivation to combine the references:  
harder than anticipation!

Statute:

“A patent may not be obtained ... [if] the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art....”

35 U.S.C. § 103

# Preferred Prior Art

A single prior art reference that teaches all the elements of the invention and that was made public more than one year before the creation of the invention.

# Tips On Searching For Prior Art

Read the patent (or patent application) to understand the invention

Review the claims for unique (inventive) elements; ask “Why did they get this patent?”

Examine the list of prior art cited on the face of the patent

Select search terms (words) that describe the inventive concept (get from dictionary, thesaurus, and previously-cited patents)

Remember: a single prior art reference disclosing all the elements of a claim is better than a group of references that disclose all the elements of the claim.

# Where to Search For Prior Art

The best source of prior art is ... you!!!

Your knowledge, experience, and network are the best places to begin searching.

Also look at:

- History of the potentially-accused product.
- History of the market, standards organizations, conferences, etc.

# Where to Search For Prior Art

For patents:

<http://patft.uspto.gov/>

<http://www.google.com/patents>

<http://www.freepatentsonline.com>

<http://free.patentfetcher.com/Patent-Fetcher-Form.php>

<http://www.pat2pdf.org/>

# Where to Search For Prior Art

For publications and other prior art:

[http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)

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

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

<http://www.peertopatent.org/main/education>

<http://www.acm.org>

<http://www.ieee.org>

<http://citeseerx.ist.psu.edu>

IBM.

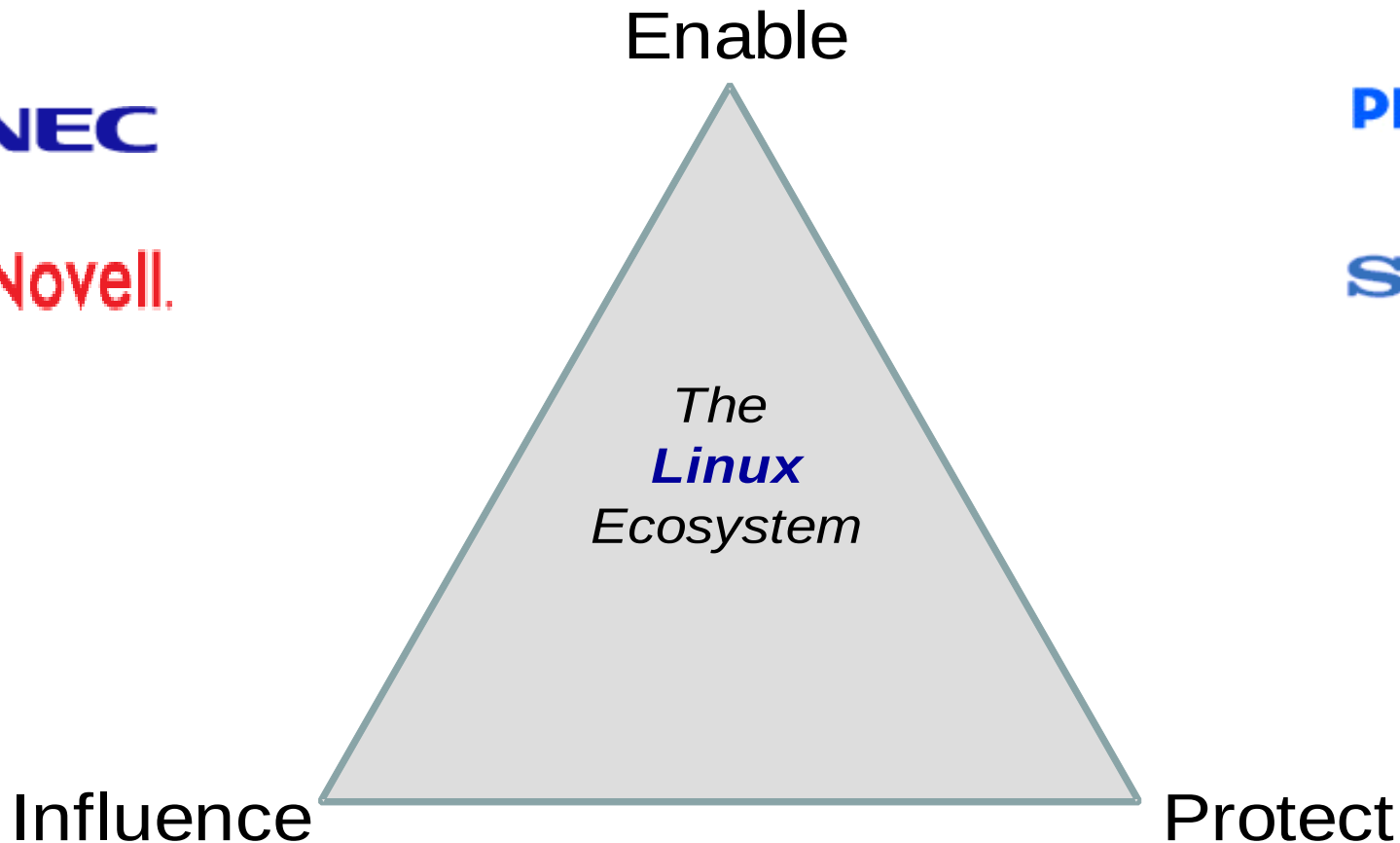
 redhat.

NEC

PHILIPS

Novell.

SONY.



OIN Exists to Ensure that Patent Issues Do Not Impair the Linux Ecosystem's Ability to Grow

# Summary of OIN's Operational Activities

- **Open Invention Network – Industrial Firms Committed to Open Source and Linux and Engaged in Purchasing/Licensing of Patents & Parallel External Actions to Create a Patent “No Fly Zone” around Linux**

- **Patent Acquisitions** (past and current inventions)
- **Directed Invention** (Universities, Individual Inventors, Acquired Patent-Centric SMEs)
  - Patents
  - Defensive Publications
  - Patents w/Defensive Publications
- **Royalty Free Licenses**
- **One on One Navigational Guidance to Those Under Threat**

# Summary of OIN's Operational Activities - Linux Defenders

## •Linux Defenders

- OS “Peer to Patent”
- OS “Post-Issue Peer to Patent”
- “Defensive Publications”
- “LinuxDefenders911”

# OIN and Partners Collaborate to Facilitate Market-Led Reform

## Linux Defenders Overview

- **OS Peer to Patent** – Ensuring Prior Art Relevant to Current Patent Applications is Known so Poor Quality Applications can be Rejected
- **OS Post-Issue Peer to Patent** – Ensuring Prior Art Relevant to Previously Issued Patents is Identified and Poor Quality Patents Can be Invalidated
- Ensure that **“Defensive Publications”** are Produced and Available to Patent Examiners to Serve as Prior Art that Limits Future Marginal Quality Patenting in Linux and Ensures “Freedom of Action”

- **Linux Defenders is part of Global Market-Led Patent and IAM reform that has application in the new context of OSS Innovation across technologies**

- **OSS/Linux Community has a vehicle in defensive publications to codify what is known so that others do not later secure patents on these ideas**

- **The OSS/Linux Community must meet Legislative, Regulatory and Judicial Reform “half way” for true change to occur & ensure protection**

- **Those interested in safeguarding Open Source and Linux need to act to ensure that ONLY high quality patent applications issue, ALL poor quality patent applications are rejected, and ALL poor quality patents that have already been issued are invalidated.**

- **Participation is increasingly becoming an obligation!**

# **QUESTIONS?**

**TELL US WHAT YOU THINK:  
[REDHAT.COM/SUMMIT-SURVEY](https://redhat.com/summit-survey)**