

# Building a Patent Portfolio for Strategic Advantage

Bruce D. Sunstein

Bromberg & Sunstein LLP

Boston, MA USA (617) 443-9292

[www.bromsun.com](http://www.bromsun.com)

© 2003 Bromberg & Sunstein LLP

BROMBERG ✦ SUNSTEIN LLP

# Archimedes:

n “If you give me a lever of sufficient length and a fulcrum in the right place, I can move the world.”

# Was Archimedes a Patent Lawyer?

n “If you give me a lever of sufficient length and a fulcrum in the right place, I can move the world.”

# Knowing where to apply the leverage of patents—

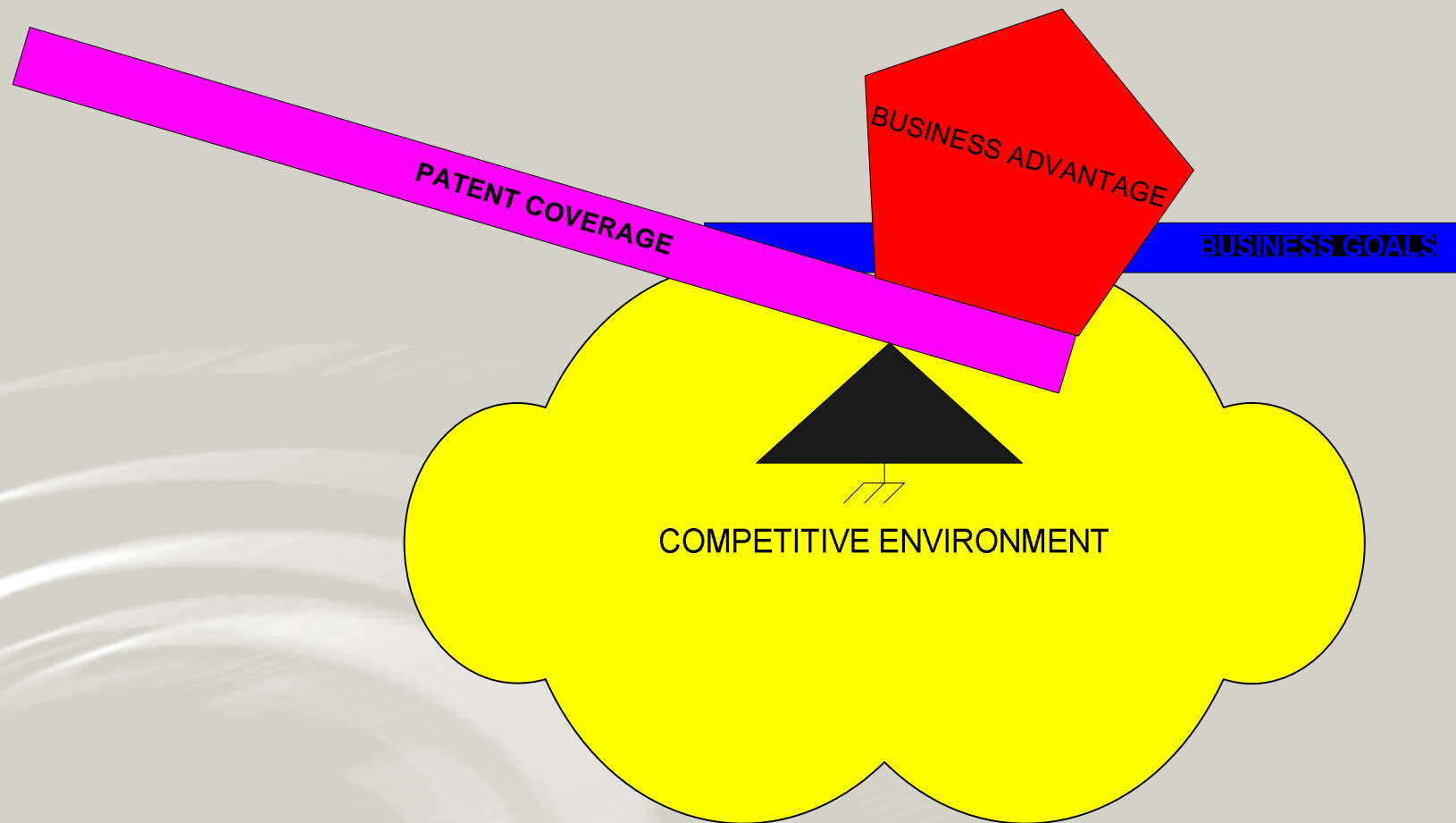
**n** is critical to successful patent portfolio building

**n** cannot be done without

**u** awareness of business goals and

**u** knowledge of the competitive landscape

# Patent Leverage



# Our setting:

- n Our company has a growing portfolio of technology
- n With pending and issued patents
- n How do we know
  - u What to file?
  - u When to file?
  - u When to license?

# We should develop a patent portfolio on purpose!

- n Not based on accident
- n Not based on blind guessing
- n Instead, based on a planned strategy, aimed at supporting defined business objectives

# How to develop a patent portfolio on purpose

- n Develop a patent strategy that fits the business strategy, and
- n Make the patent and business strategies appropriate to the competitive environment

# Making the patent strategy fit business strategy

- n Patent strategy must be aimed to protect existing and potential markets of the company
- n Patent strategy and business strategy must inform each other
  - u Existing and potential markets that can be protected may depend on how well the company can develop technology in a particular area

# Patent strategy and business strategy can inform one another

- n But only when the custodians of each meet with one another
- n Required are regular meetings of patent counsel with heads of business development, marketing, and technology (drug) development

# IP Portfolio Meetings

- n Use a patent portfolio listing
  - u Place new inventions on it, and indicate timing for filing
  - u Place existing filings on it, with filing data, pertinent product lines, and status
- n Review and update the listing in meetings, so the listing also becomes an agenda
- n Have patent counsel update the listing between meetings

# IP Portfolio Meetings (cont'd)

- n Items on the portfolio listing can be adjusted in relation to the business strategy
- n The business strategy can be adjusted in relation to items on the portfolio listing
- n The adjustments must take competition into account

# Making your patent strategy deal with the competition

- n Learn what the competition is doing
- n Develop an integrated view of the competition and the prior art
- n Use the integrated view to inform the patent strategy

# Learn about the competition

**n** SEC filings (esp. Form 10-K): EDGAR filings on SEC website and e.g. [www.secinfo.com](http://www.secinfo.com) (also Lexis, Westlaw)

**u** Competition is a required disclosure

**u** Material contracts

**u** Contingent liabilities in notes to financial statements

# Learn about the competition

(cont'd)

**n** Competitor web sites & WWW generally

**u** Use search engines like [www.google.com](http://www.google.com) and [www.dogpile.com](http://www.dogpile.com)

**n** Newspapers and trade journals

**u** Often in Westlaw and Lexis

**n** Licensing authorities; e.g., FDA Orange Book, [www.fda.gov/cder](http://www.fda.gov/cder)

# Learn about the competition— Patent Searching

- n [www.uspto.gov](http://www.uspto.gov): consider searching by U.S. and international classes
- n International class searches on EPO website can yield important English & foreign language documents, too:  
<http://ep.espacenet.com>
- n Free patent family information in English available from German patent office,  
[www.depatistnet.de](http://www.depatistnet.de)

# More Searching— Proprietary Databases

**n** Dialog ([www.dialog.com](http://www.dialog.com))

**u** Abundant technical literature

**n** STN database of American Chemical Society (<http://stnweb.cas.org>)

**u** Abundant technical literature

**n** Delphion ([www.delphion.com](http://www.delphion.com))

**n** Micropatent ([www.micropat.com](http://www.micropat.com))

# And non-proprietary, non-patent databases, too

**n** NIH: National Center for Biotechnology  
Information

**u** [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov) has several important  
databases, including PubMed

# Making your patent strategy deal with the competition

- n Learn what the competition is doing ✓
- n Develop an integrated view of the competition and the prior art
- n Use the integrated view to inform the patent strategy

# Developing an integrated view

- n Patent mapping can help

- n Example: IPVision

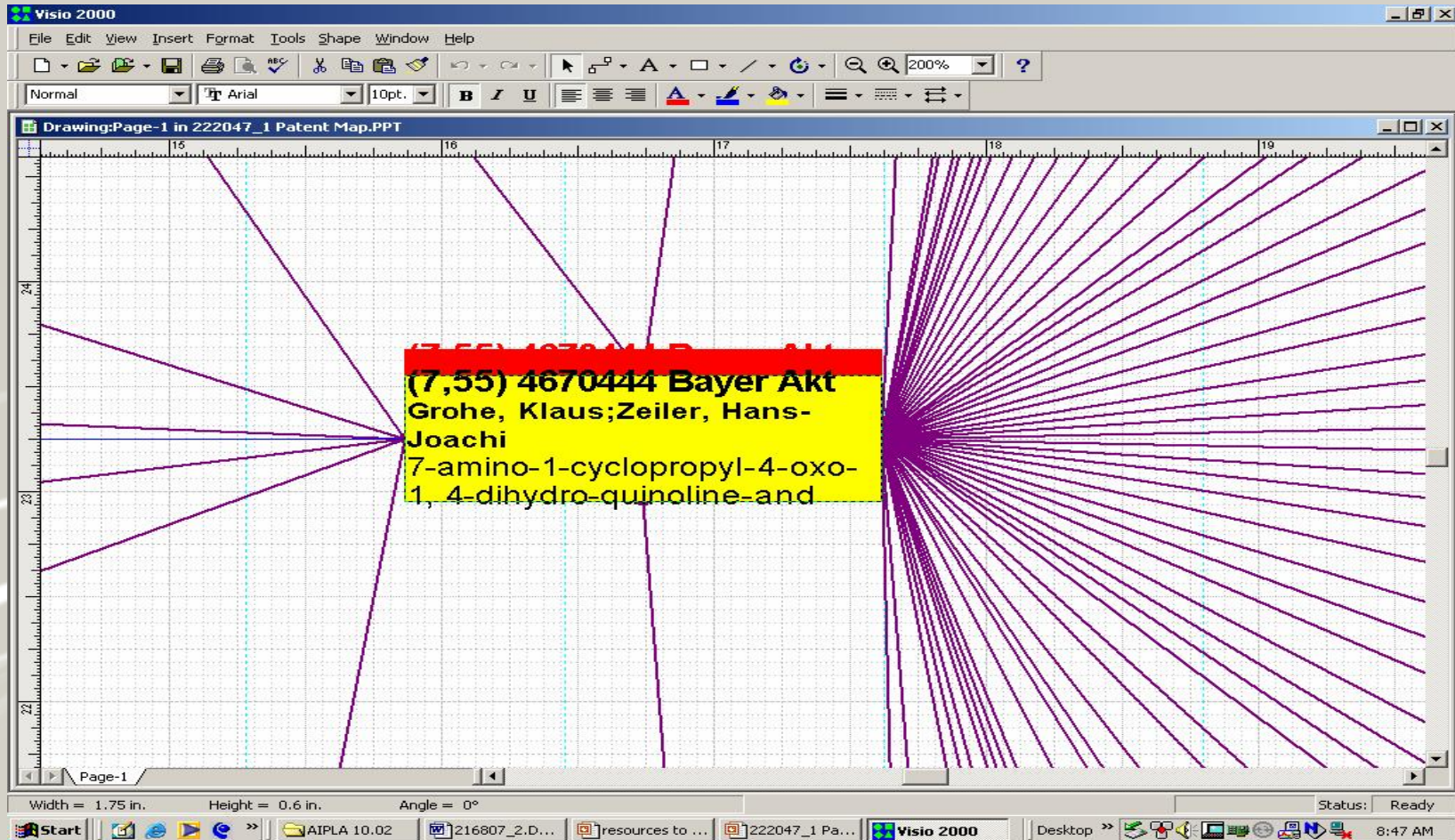
[www.tecpatents.com/ipvision/ipportal.htm](http://www.tecpatents.com/ipvision/ipportal.htm)

- n Specific map: base patent to Cipro®  
(ciprofloxacin) of Bayer Aktiengesellschaft

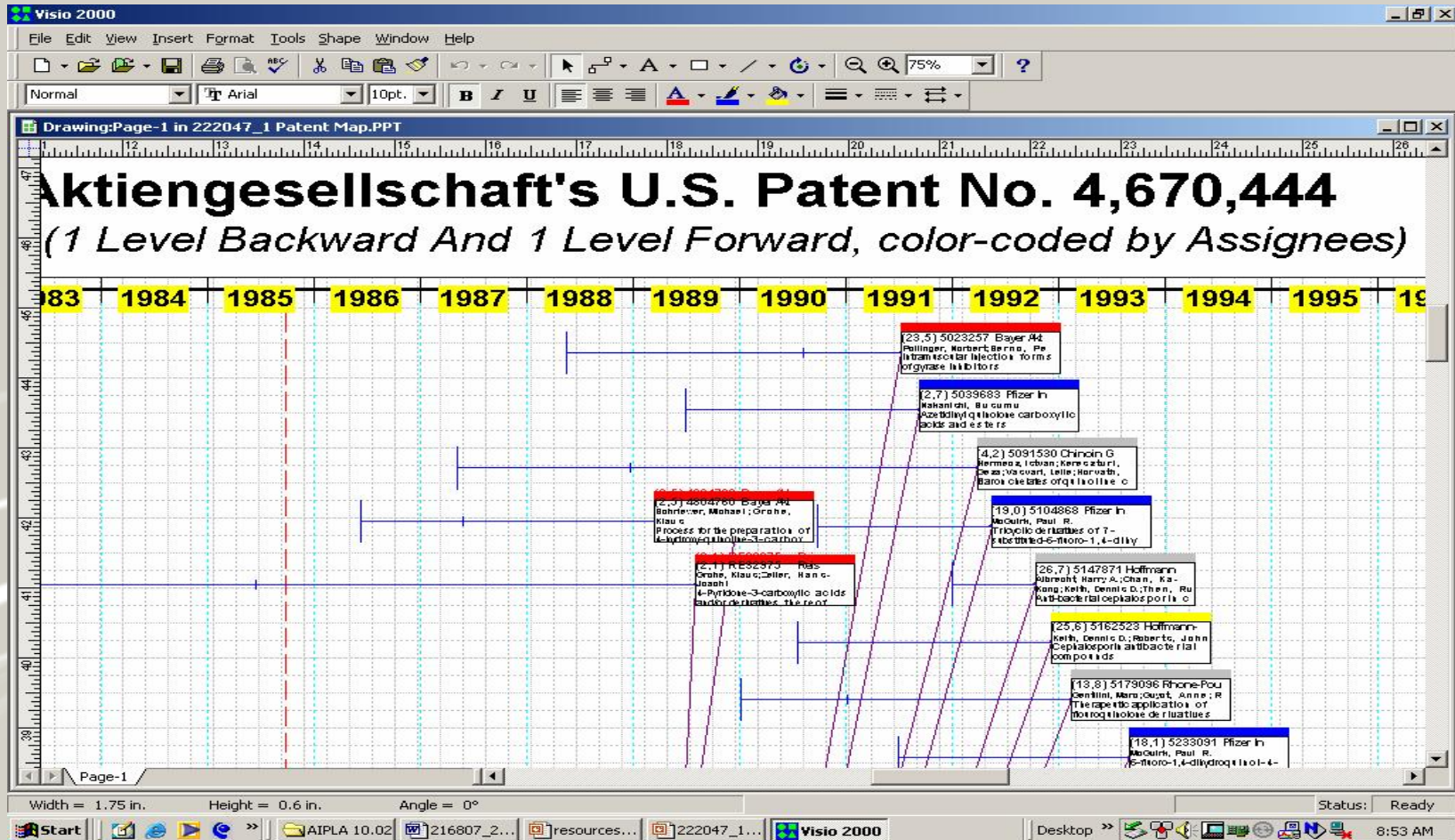
  - u Found in the Orange book, 4,670,444



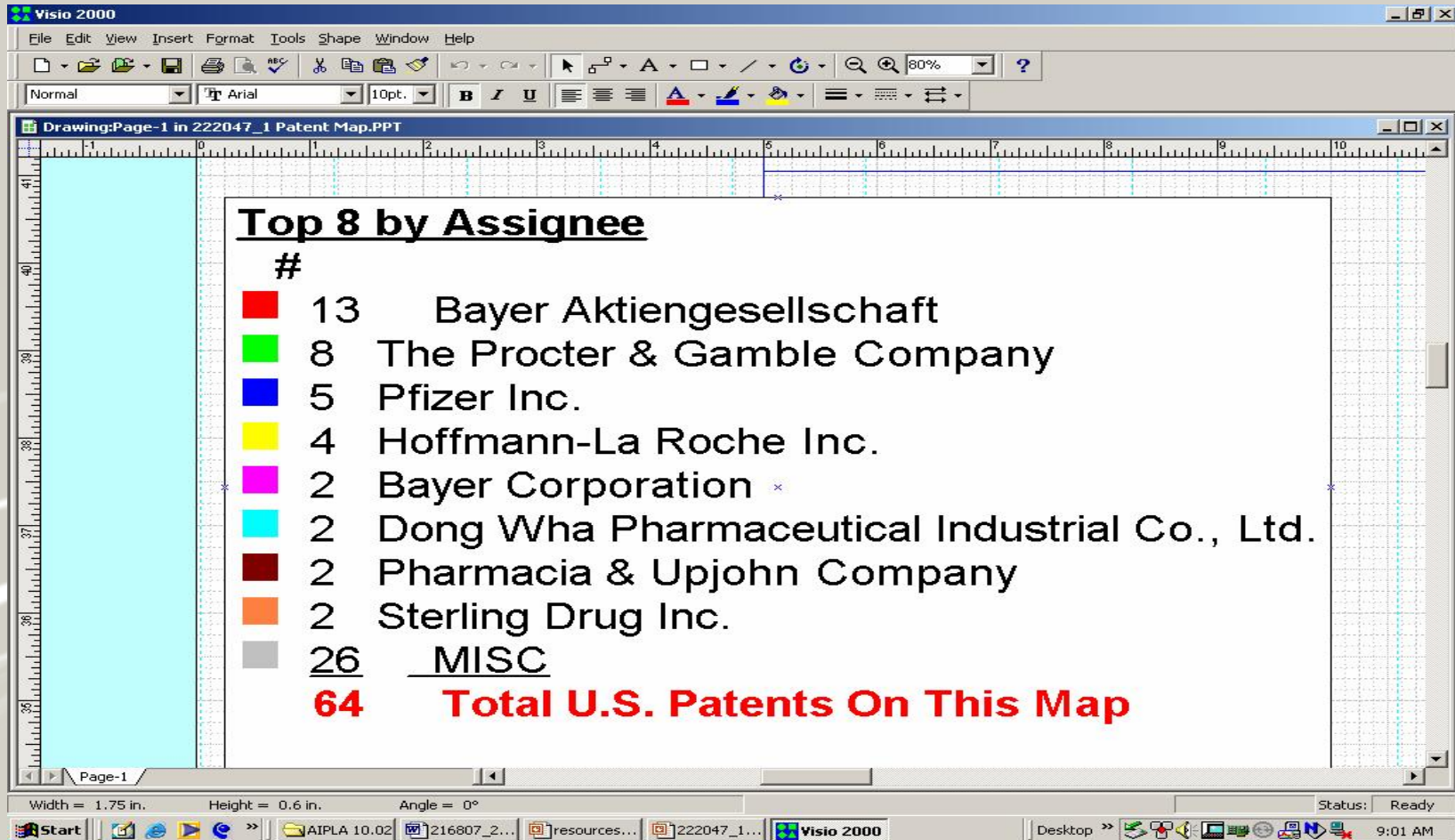
# The Starting Patent



# Patent Time Scale



# Patent Owners (Assignees)



# The Inventors

The screenshot shows the Visio 2000 interface. The main drawing area contains a patent map diagram with a grid. The years 1999, 2000, 2001, and 2002 are highlighted in yellow at the top of the grid. To the right of the grid is a text box titled "List Of Inventors On This Map" containing the following list:

#	Inventor Name
12	Demuth, Jr., Thomas P.
12	White, Ronald E.
8	Grohe, Klaus
6	Metzger, Karl G.
6	Zeiler, Hans-Joachim
5	Keith, Dennis D.
4	McGuirk, Paul R.
3	Albrecht, Harry A.
3	Wei, Chung-Chen
3	Weigele, Manfred
2	Barbachyn, Michael R.
2	Bhagat, Haresh G.
2	Bisaha, Sharon N.
2	Chung, Young-Ho

The Visio 2000 window title is "Drawing:Page-1 in 222047\_1 Patent Map.PPT". The status bar at the bottom shows "Width = 1.75 in.", "Height = 0.6 in.", "Angle = 0°", and "Status: Ready". The taskbar at the bottom shows the Start button and several open applications including AIPLA 10.02, 216807\_2..., resources..., 222047\_1..., and Visio 2000. The system tray shows the Desktop icon and the time 9:10 AM.



# The Patent Landscape Map Shows the Patent Landscape

- n Who (patent owners, inventors) obtained patent coverage
- n When they filed
- n When they obtained patent coverage
- n But not a substitute for reading!
- n Data can be developed manually, too

# The Co-Citation Map

- n Same starting patent
- n Find all patents (“forward references”) that cite this patent
- n Find all references cited by the forward references
  - u Some of these might be pertinent prior art, particularly if cited by a number of forward references

Bayer Aktiengesellschaft's U.S. Patent No. 4,670,444 Co-Citation Map (1 Level Forward Then 1 Level Backward, color-coded by Assignees)

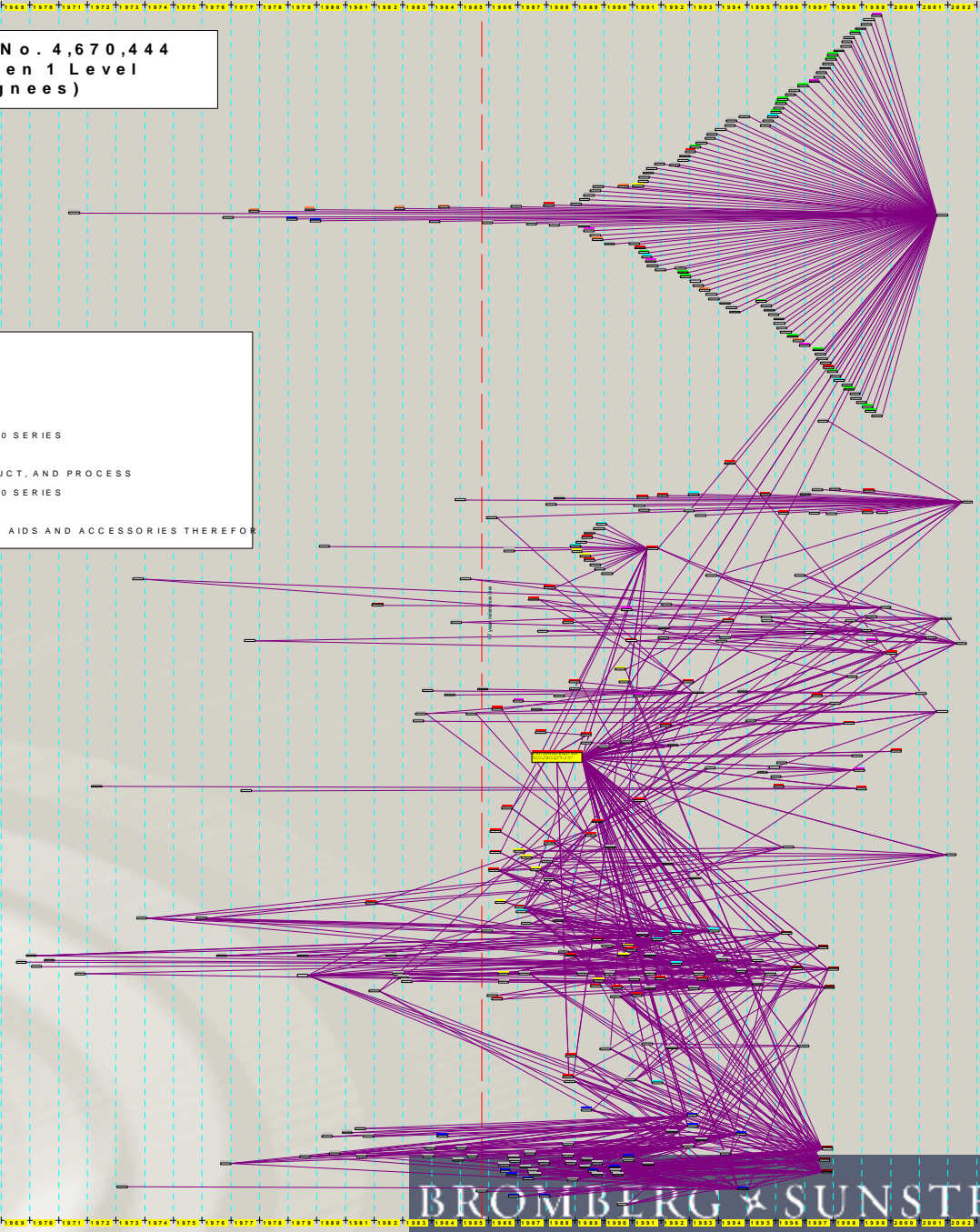
Top 8 by Assignee

#	Assignee
53	Bayer Aktiengesellschaft
18	Edward Mendell Co., Inc.
16	Hoffmann-La Roche Inc.
13	Warner-Lambert Company
12	<blank>
12	Pfizer Inc.
9	The Procter & Gamble Company
8	Alza Corporation
<b>237 MIS C</b>	
<b>378 U.S. Patents On This Map</b>	

List Of U.S. Classifications On This Map

#	Classification
177	514 - DRUG, BIO-AFFECTING AND BODY TREATING COMPOSITIONS
123	424 - DRUG, BIO-AFFECTING AND BODY TREATING COMPOSITIONS
23	540 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
19	546 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
13	544 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
4	560 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
4	564 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
2	428 - STOCK MATERIAL OR MISCELLANEOUS ARTICLES
2	525 - SYNTHETIC RESINS OR NATURAL RUBBERS -- PART OF THE CLASS 520 SERIES
2	552 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
1	002 - APPAREL
1	403 - JOINTS AND CONNECTIONS
1	429 - CHEMISTRY: ELECTRICAL CURRENT PRODUCING APPARATUS, PRODUCT, AND PROCESS
1	438 - SEMICONDUCTOR DEVICE MANUFACTURING PROCESS
1	524 - SYNTHETIC RESINS OR NATURAL RUBBERS -- PART OF THE CLASS 520 SERIES
1	549 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
1	556 - ORGANIC COMPOUNDS -- PART OF THE CLASS 532-570 SERIES
1	604 - SURGERY
1	623 - PROSTHESIS (I.E., ARTIFICIAL BODY MEMBERS), PARTS THEREOF, OR AIDS AND ACCESSORIES THEREFOR

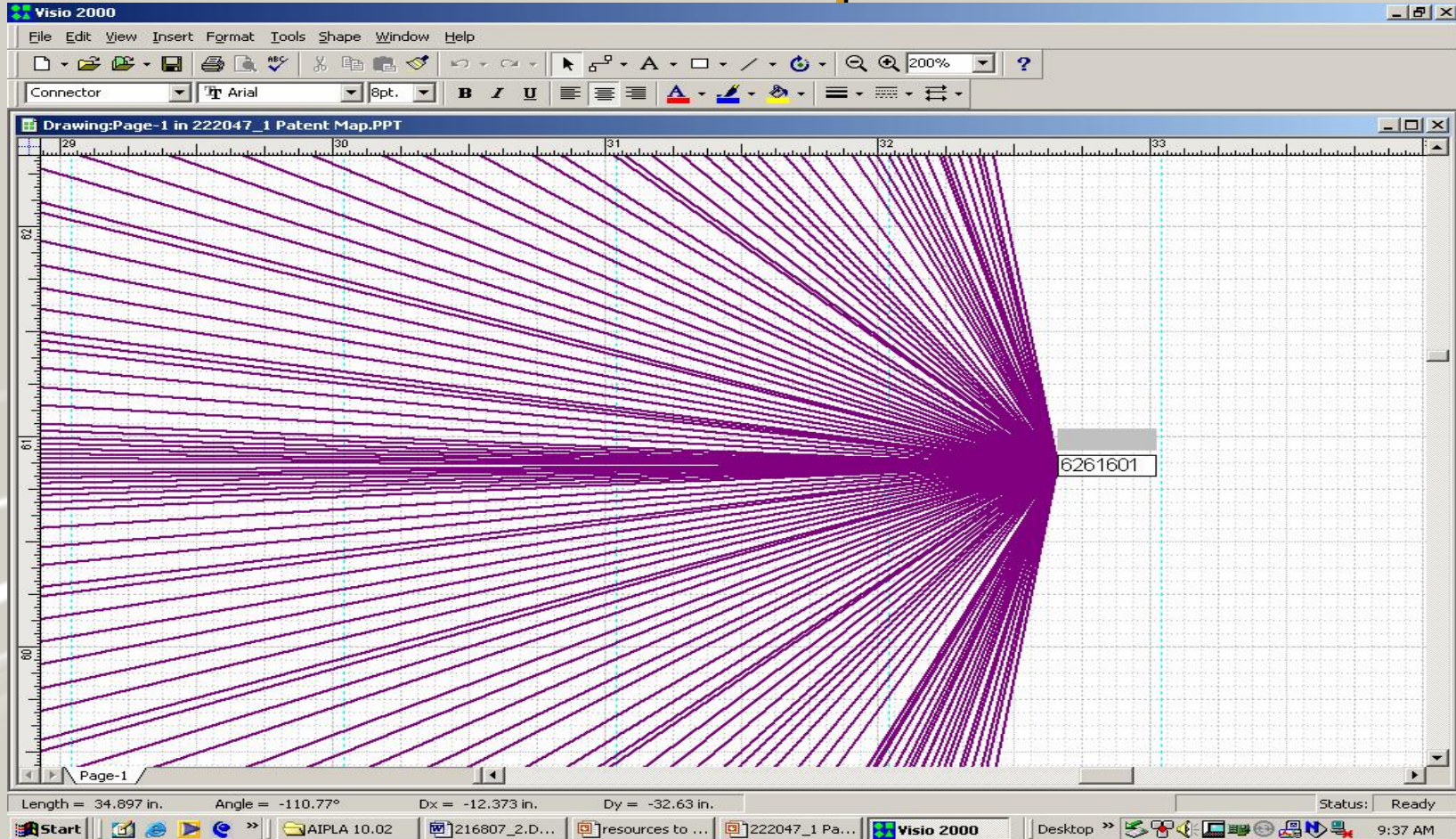
#	Classification
1	001 - GENERAL
1	002 - APPAREL
1	003 - ARCHITECTURE
1	004 - AERONAUTICS, SPACE, AND NAVIGATION
1	005 - AGRICULTURE
1	006 - ANATOMY
1	007 - ASTRONOMY
1	008 - BUSINESS
1	009 - CHEMISTRY
1	010 - COMMERCE
1	011 - CONSTRUCTION
1	012 - EDUCATION
1	013 - ELECTRICITY AND ELECTRONICS
1	014 - ENGINEERING
1	015 - ENVIRONMENTAL SCIENCE
1	016 - FOOD AND AGRICULTURE
1	017 - HEALTH CARE
1	018 - HISTORY
1	019 - HUMANITIES
1	020 - INVENTIONS
1	021 - LAW
1	022 - LIFE SCIENCES
1	023 - MATHEMATICS
1	024 - MEDICINE
1	025 - METALLURGY
1	026 - MINING
1	027 - MISCELLANEOUS
1	028 - NATURE
1	029 - NUTRITION
1	030 - OPTICS
1	031 - PHYSICS
1	032 - POLITICAL SCIENCE
1	033 - PSYCHOLOGY
1	034 - RECREATION
1	035 - RELIGION
1	036 - SOCIAL SCIENCES
1	037 - SPORTS
1	038 - TRANSPORTATION
1	039 - VISUAL ARTS
1	040 - WEAPONS
1	041 - ZOOLOGY
1	042 - MISCELLANEOUS
1	043 - MISCELLANEOUS
1	044 - MISCELLANEOUS
1	045 - MISCELLANEOUS
1	046 - MISCELLANEOUS
1	047 - MISCELLANEOUS
1	048 - MISCELLANEOUS
1	049 - MISCELLANEOUS
1	050 - MISCELLANEOUS
1	051 - MISCELLANEOUS
1	052 - MISCELLANEOUS
1	053 - MISCELLANEOUS
1	054 - MISCELLANEOUS
1	055 - MISCELLANEOUS
1	056 - MISCELLANEOUS
1	057 - MISCELLANEOUS
1	058 - MISCELLANEOUS
1	059 - MISCELLANEOUS
1	060 - MISCELLANEOUS
1	061 - MISCELLANEOUS
1	062 - MISCELLANEOUS
1	063 - MISCELLANEOUS
1	064 - MISCELLANEOUS
1	065 - MISCELLANEOUS
1	066 - MISCELLANEOUS
1	067 - MISCELLANEOUS
1	068 - MISCELLANEOUS
1	069 - MISCELLANEOUS
1	070 - MISCELLANEOUS
1	071 - MISCELLANEOUS
1	072 - MISCELLANEOUS
1	073 - MISCELLANEOUS
1	074 - MISCELLANEOUS
1	075 - MISCELLANEOUS
1	076 - MISCELLANEOUS
1	077 - MISCELLANEOUS
1	078 - MISCELLANEOUS
1	079 - MISCELLANEOUS
1	080 - MISCELLANEOUS
1	081 - MISCELLANEOUS
1	082 - MISCELLANEOUS
1	083 - MISCELLANEOUS
1	084 - MISCELLANEOUS
1	085 - MISCELLANEOUS
1	086 - MISCELLANEOUS
1	087 - MISCELLANEOUS
1	088 - MISCELLANEOUS
1	089 - MISCELLANEOUS
1	090 - MISCELLANEOUS
1	091 - MISCELLANEOUS
1	092 - MISCELLANEOUS
1	093 - MISCELLANEOUS
1	094 - MISCELLANEOUS
1	095 - MISCELLANEOUS
1	096 - MISCELLANEOUS
1	097 - MISCELLANEOUS
1	098 - MISCELLANEOUS
1	099 - MISCELLANEOUS
1	100 - MISCELLANEOUS



#	Assignee
1	Gilbe, Klaus
2	Barnes, Earl G.
3	Zeller, Hans-Joachim
4	Fairclough, Lewis
5	Buchwal, Andre R.
6	DeWitt, Jr., Thomas P.
7	White, Ronald G.
8	Endersby, Andrew
9	Santhor, John N.
10	Chibrikov, Val M.
11	Reith, Dennis D.
12	Reith, Roger
13	Kubicek, Eric M.
14	Watanabe, Jun-ichi
15	Wai, Chung-Chan
16	Chen, Yuh-ling
17	Wu, Meng-Feng
18	Albright, Harry A.
19	Chen, Thomas
20	Maggi, Lucretia
21	Therese, Felix
22	Chu, Daniel T.
23	Lu, Maria, Aida
24	Leather, George V.
25	Wang, Hsueh-Chi
26	Brem, Klaus-Dieter
27	Chen, Ha-Rong
28	Collerton, Timothy P.
29	Dickhammer, Walter
30	Wang, Hsueh-Chi
31	Hermsdorf, Ulrich
32	Hermsdorf, Ulrich
33	Hermsdorf, Ulrich
34	Hermsdorf, Ulrich
35	Hermsdorf, Ulrich
36	Hermsdorf, Ulrich
37	Hermsdorf, Ulrich
38	Hermsdorf, Ulrich
39	Hermsdorf, Ulrich
40	Hermsdorf, Ulrich
41	Hermsdorf, Ulrich
42	Hermsdorf, Ulrich
43	Hermsdorf, Ulrich
44	Hermsdorf, Ulrich
45	Hermsdorf, Ulrich
46	Hermsdorf, Ulrich
47	Hermsdorf, Ulrich
48	Hermsdorf, Ulrich
49	Hermsdorf, Ulrich
50	Hermsdorf, Ulrich
51	Hermsdorf, Ulrich
52	Hermsdorf, Ulrich
53	Hermsdorf, Ulrich
54	Hermsdorf, Ulrich
55	Hermsdorf, Ulrich
56	Hermsdorf, Ulrich
57	Hermsdorf, Ulrich
58	Hermsdorf, Ulrich
59	Hermsdorf, Ulrich
60	Hermsdorf, Ulrich
61	Hermsdorf, Ulrich
62	Hermsdorf, Ulrich
63	Hermsdorf, Ulrich
64	Hermsdorf, Ulrich
65	Hermsdorf, Ulrich
66	Hermsdorf, Ulrich
67	Hermsdorf, Ulrich
68	Hermsdorf, Ulrich
69	Hermsdorf, Ulrich
70	Hermsdorf, Ulrich
71	Hermsdorf, Ulrich
72	Hermsdorf, Ulrich
73	Hermsdorf, Ulrich
74	Hermsdorf, Ulrich
75	Hermsdorf, Ulrich
76	Hermsdorf, Ulrich
77	Hermsdorf, Ulrich
78	Hermsdorf, Ulrich
79	Hermsdorf, Ulrich
80	Hermsdorf, Ulrich
81	Hermsdorf, Ulrich
82	Hermsdorf, Ulrich
83	Hermsdorf, Ulrich
84	Hermsdorf, Ulrich
85	Hermsdorf, Ulrich
86	Hermsdorf, Ulrich
87	Hermsdorf, Ulrich
88	Hermsdorf, Ulrich
89	Hermsdorf, Ulrich
90	Hermsdorf, Ulrich
91	Hermsdorf, Ulrich
92	Hermsdorf, Ulrich
93	Hermsdorf, Ulrich
94	Hermsdorf, Ulrich
95	Hermsdorf, Ulrich
96	Hermsdorf, Ulrich
97	Hermsdorf, Ulrich
98	Hermsdorf, Ulrich
99	Hermsdorf, Ulrich
100	Hermsdorf, Ulrich

Aug

# But other things can turn up too



# Patent 6261601

n Assigned to Ranbaxy Laboratories Limited

n Licensed in by Bayer

u Indian publication *Economic Times* (August 15, 2002)

# Making your patent strategy deal with the competition

- n** Learn what the competition is doing ✓
- n** Develop an integrated view of the competition and the prior art ✓
- n** Use the integrated view to inform the patent strategy

# Using the integrated view to inform the patent strategy

- n Must reflect the technical and market position and goals of the company
- n Use regular, joint meetings to tune the IP Portfolio:
  - u Patent counsel
  - u Marketing head
  - u Technology head
  - u Business development head

# IP Strategy Sessions

- n Share information and insights
- n Develop and refine goals
- n Review position of company in relation to competition and company goals
- n Agree on filings and budget consistent with these goals and the competitive context
- n Voila!

# Your patent strategy deals with the competition

- n You know what the competition is doing
- n You have an integrated view of the competition and the prior art
- n The integrated view informs the patent strategy

Thank you and good luck!