

What Every CEO Needs To Know About The Value Of Patents

Presentation to the Boston Entrepreneurs' Network
(www.Boston-ENet.org)
December 4, 2007

Robert P. Weber
Managing Director
Patent Kinetics, LLC
www.PatentKinetics.com

Expanded
Version

Notices and Disclaimers

- Patent Kinetics, LLC is a patent and domain name broker. See www.patentkinetics.com for more information
- Bob Weber, its Managing Director, is not an attorney
- Nothing in this presentation or related remarks tonight constitutes, or shall be construed as, the giving of legal advice and/or the practice of the Law

P.C.A. présente un film de

SERGIO LEONE
avec
CLINT EASTWOOD

**LE BON
LA BRUTE
LE TRUAND**

avec
LEE VAN CLEEF
ALDO GIUFFRÈ

LUIGI PISTILLI
ENZO PETITO
JOHN BARTHA
ANTONIO GARALE
RENATO CEFANELLI

WADA RASSIMOV
CLAUDIO SCARCHILLI
LIVIO IORIOZON
SANDRO SCARCHILLI
ANGELO NOVI

et avec **MARIO BREGA**

avec
ELI WALLACH

dans le rôle de TUCO

Scénario et Dialogues

AGE SCARFELLI LUCIANO VINCENZONI et SERGIO LEONE

Réalisé par

SERGIO LEONE

Musique de

ENnio MORRICONE

Effets sonores LORREA

TECHNICOLOR TECHNISCOPÉ

Produit par

ALBERTO GRIMALDI pour la P.C.A.



Surprise!

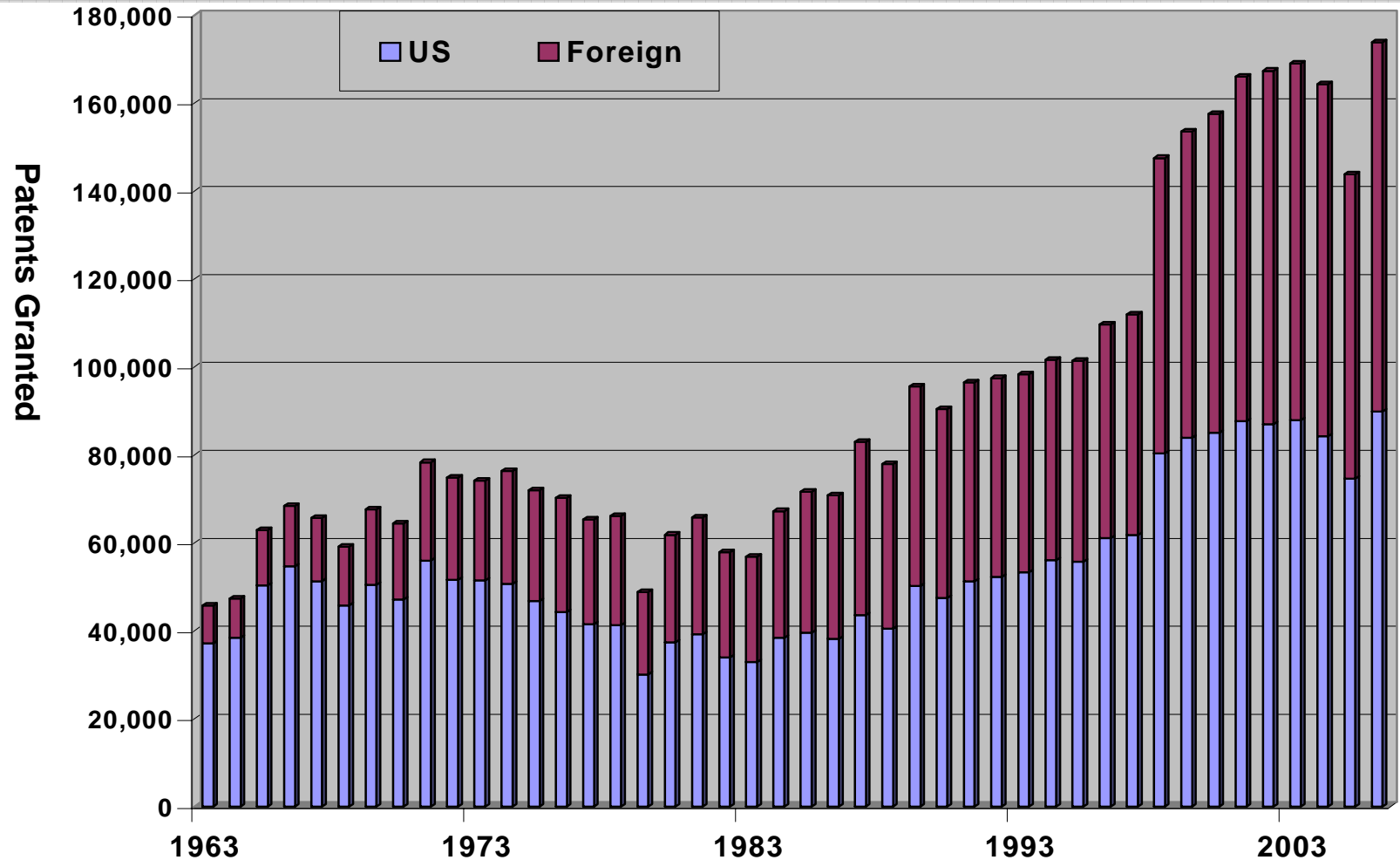
**MOST PATENTS ARE
WORTHLESS!**

Survival Analysis: Most Patents Are Worthless!

- Half (54%) of patentees allow their patents to expire early through failure to pay maintenance fees
- Expiration reflects a judgment by the patent owner that the patent has little or no value
- The Patent Paradox: Why do CEOs continue to invest resources in patent-related activities if so few patents have any real value?

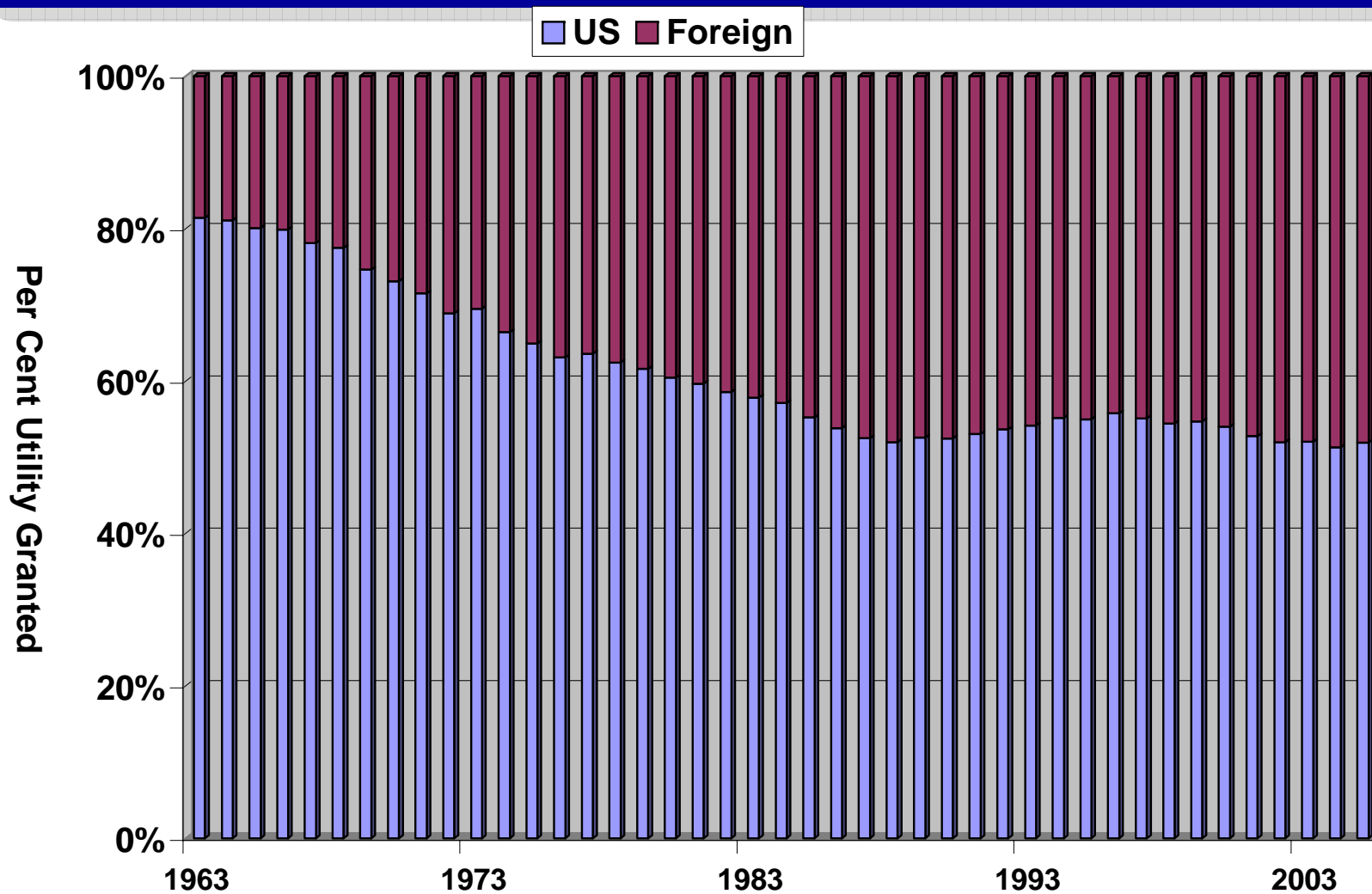
US Utility Patents Granted 1963-2005

By US/Foreign Assignee



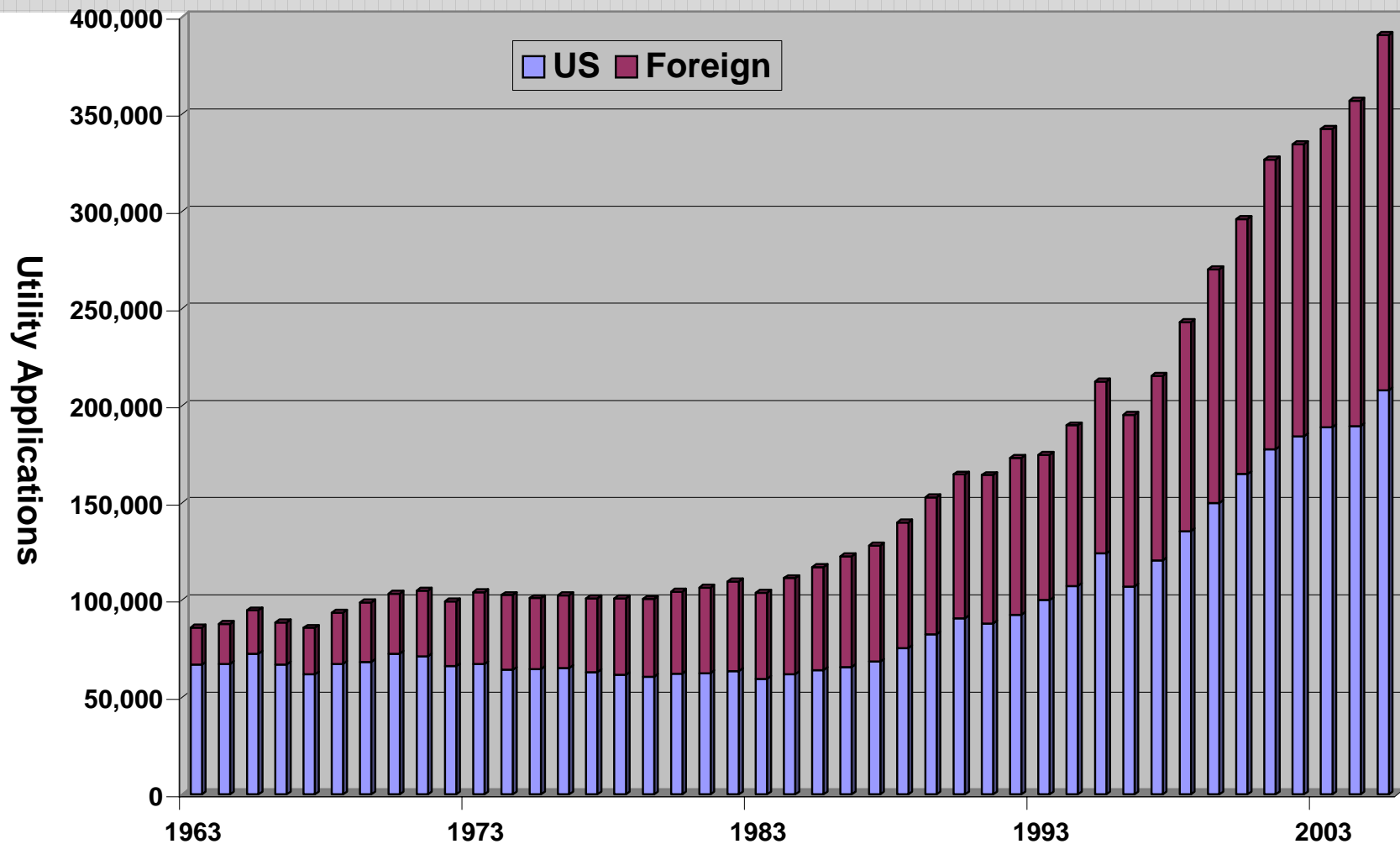
Per Cent US / Foreign Utility Patents Issued

1963-2005



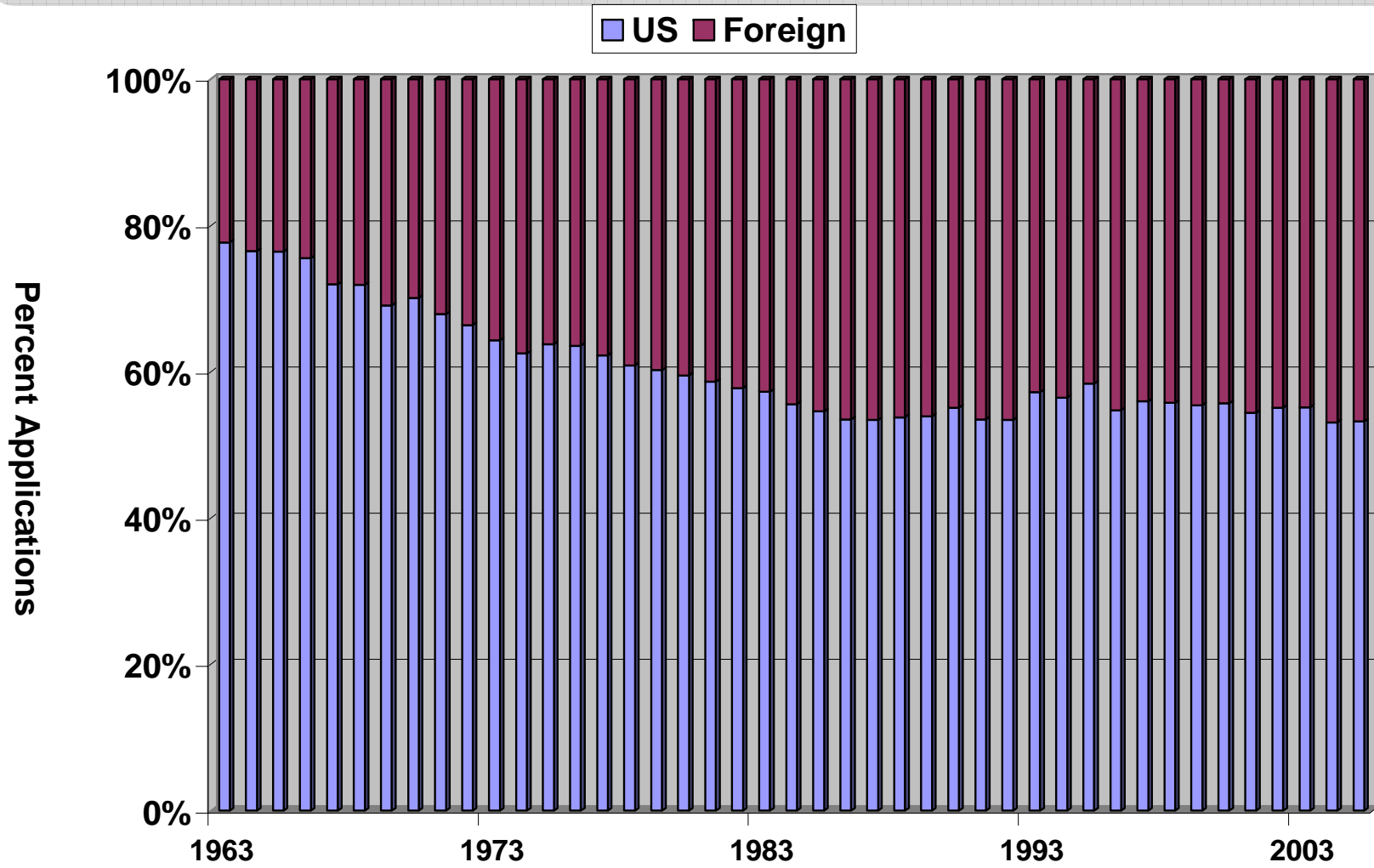
US Utility Applications 1963-2005

By US / Foreign Applicant



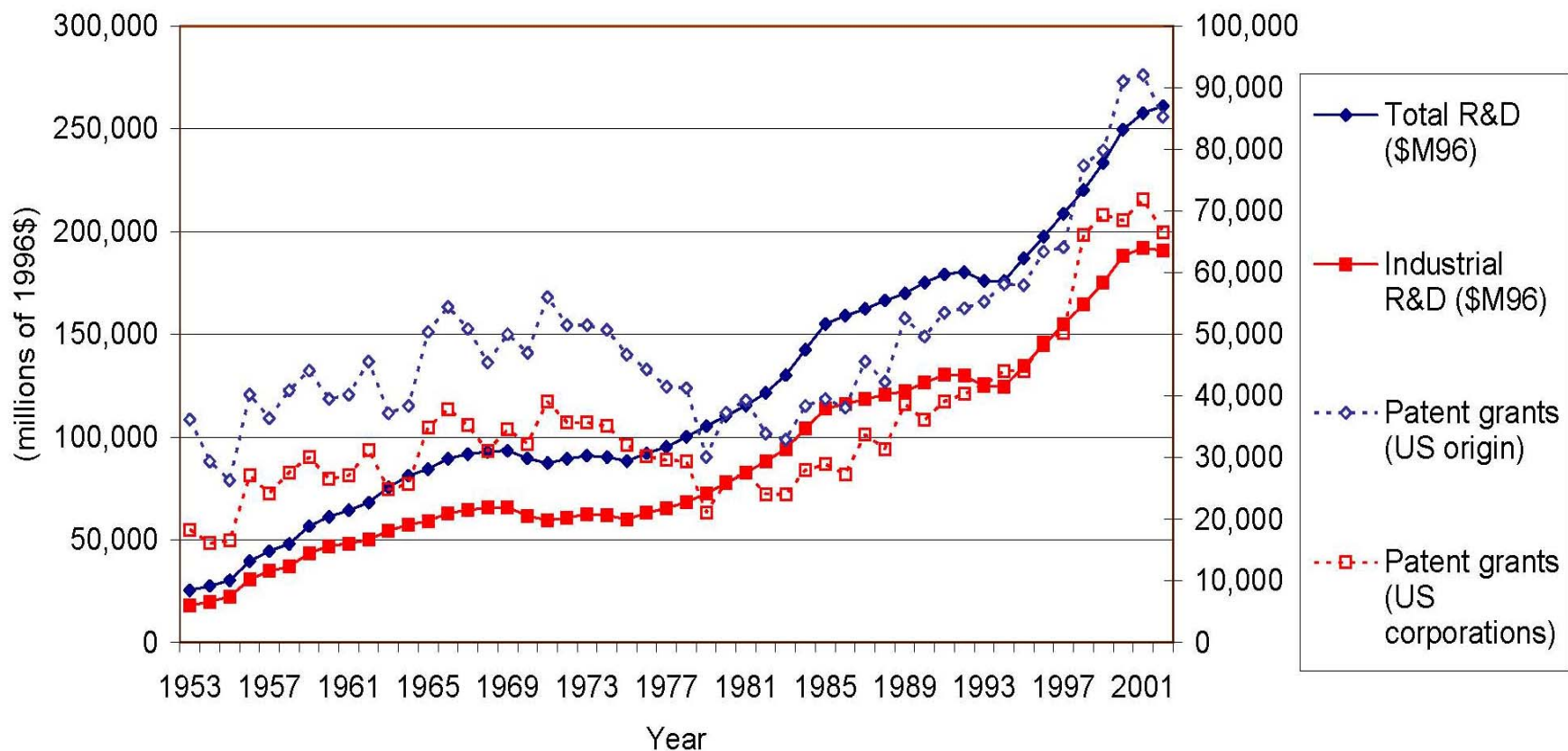
Per Cent US/Foreign Applications

1963-2005 – USPTO Data



US R&D and Patenting Kept Pace Since Late 1970s (BHall,2004)

US R&D and Patenting 1953-2002



Per Cent of Patents Expiring By Class of Patentee / Assignee (Moore, 2005)

	Unexpired Patents	Expired in 12 Years	Expired in 8 Years	Expired in 4 years	Expired Patents
US Corporation	51.5%	16.2%	19.7%	12.7%	48.5%
Foreign Corporation	48.7%	18.3%	19.7%	13.3%	51.3%
Foreign Government	37.7%	15.9%	29.0%	17.4%	62.3%
US Individual	34.2%	13.8%	26.9%	25.1%	65.8%
Un-Assigned	31.9%	14.5%	24.8%	28.8%	68.1%
Foreign Individual	29.8%	17.2%	26.2%	26.9%	70.2%
US Government	25.4%	13.6%	43.0%	18.1%	74.6%

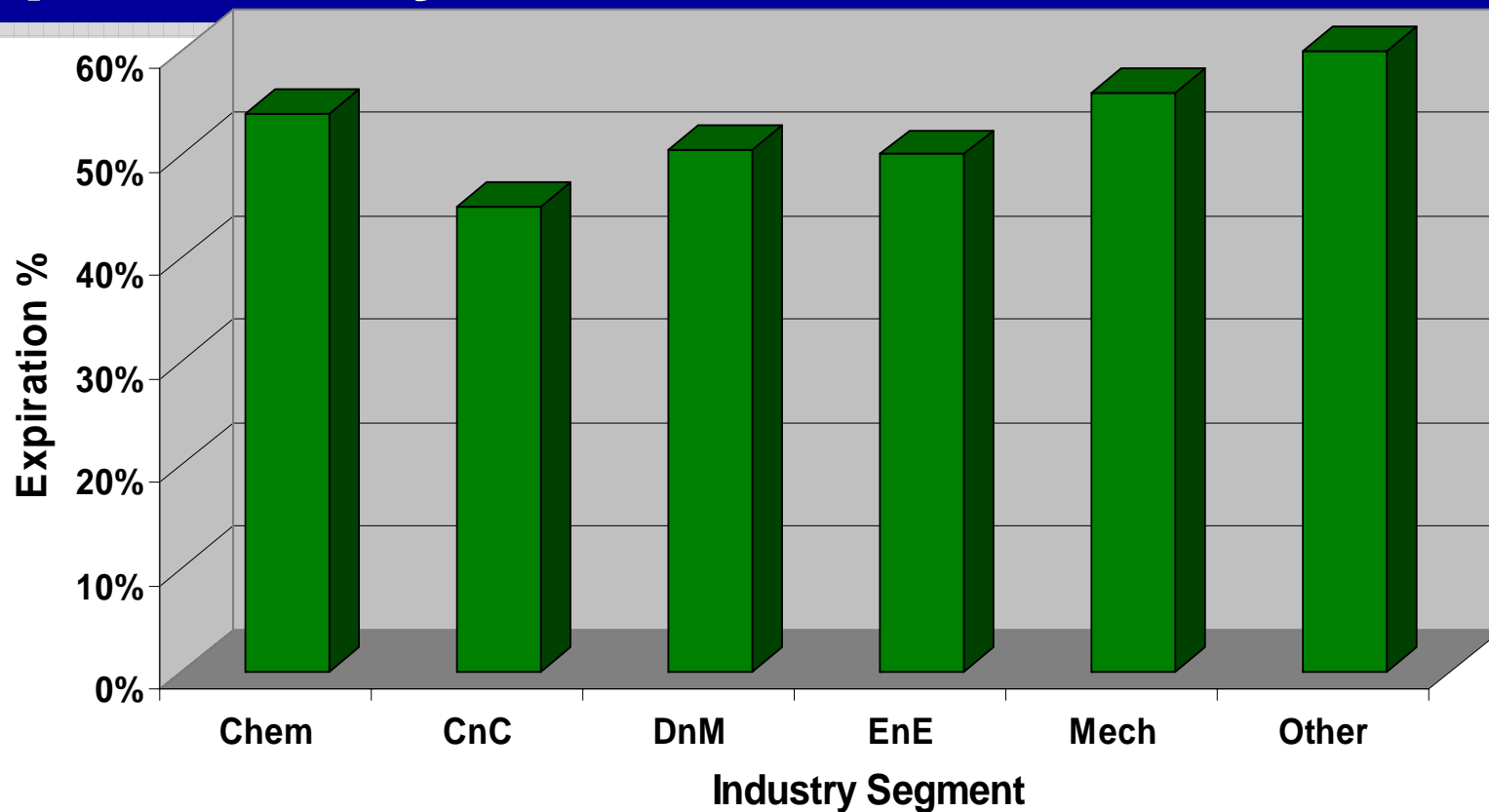
Fewer Expired

More Expired

Conclusion: Domestic and foreign corporations least likely to let patents expire prematurely

Expiration By Broad Tech Class

(Moore 2005)



Chem – Chemistry
CnC – Communications & Computer
DnM – Drug & Medical
EnE – Electrical & Electronics
Mech – Mechanical

Findings by Industry

- **Communication and computer, drug and medical, electrical and electronics patents were all more likely to be maintained**
- **Mechanical patents and patents in the catch-all “Other” category were more likely to expire.**
- **Chemical patents seemed to fall more towards the middle.**

Questions:

- ***Patent Paradox***: if most patents have little or no expected economic value, why do individuals and corporations patent so heavily?
- What factors contribute to the judgment of worthlessness?
- What makes patents valuable?
- How are patents valued?

Some Theories of Patent Value

- **Treating patents as the “underlying” for an option, as in Black-Scholes option pricing**
 - Probably doesn’t work well since the distribution of value does not conform to the standard “bell curve” distribution
 - Probably conforms to Poisson distributions or others used to characterize infrequent events (e.g., few very valuable patents)
- **Mathematical prediction formulas (regression) using based on patent Survival Analysis**
 - Maybe, but this method deals with the average, the common, the ordinary
- **What’s it worth in litigation, a/k/a How Big Is The Target?**

Survival Analysis: Compared With Expired Patents, Unexpired Patents

Moore (2005)

- **Had more claims**
 - More inventions
- **Cited more US patent prior art references**
 - Less vulnerable if litigated
- **Received more citations by subsequent patents**
 - Judged important by others
- **Listed more inventors**
 - May indicate more resources invested
- **Had more related applications**
 - Part of a broader patent portfolio

Where's The Value?

- **Value is most often derived from an extensive and growing patent portfolio**
- **Portfolios improve scale and diversity**
 - Broader coverage
 - More to (cross-) license
 - More likely to succeed in litigation
- **Current environment requires high volume, portfolio approach**
 - Broad portfolios are the best defense against competitors armed with patents
 - MAD – Mutually Assured Destruction
 - Cross-licensing
- **In some circumstances, patent assertion has become a way to monetize the investments in IP**

“Super-patents” – A Collection Of Related Patents (Parchomovosky &Wagner)

- **Advantages include:**

- Eases subsequent in-house innovation
- Attracts related external innovations
- Avoids costly litigation
- Improves bargaining position
- Improves defensive positions
- Enhances efforts to attract capital
- Expands the freedom of research inquiry
- Addresses uncertainty related to future market conditions and competitors
- Addresses uncertainty in the patent law
- May lay a foundation for patent assertion

Building Portfolios Of Related Patents Typically Leads To Greater Value

- **Develop inventions in-house**
 - Develop, implement, and evolve a patent strategy
 - Manage innovation
- **Outsource innovation but retain ownership**
 - Some firms can do it better for a price
- **The M/A route**
 - Some companies have been acquired mainly for their IP
- **Acquire portfolios**
 - From owners
 - Through brokers, auctions, etc.

Where Individual Inventors Go Wrong

- **Inventors substantially overestimate the value of their patent(s) and/or pending applications**
- **Although there is no obligation to search, many fail to locate prior art that should be cited**
 - Negates the longer term value of their efforts
- **Not able to leverage guidance from patent counsel**
 - Short sighted, economically constrained
 - Unwilling and/or unable to expand team
 - Make common mistakes despite guidance

Common Mistakes

- **Publish results or details prior to filing**
- **Publicly offer for sale too soon**
- **Disclose details to investors before filing without NDA**
- **Use resources of their employer to develop inventions**
- **Have duty to assign to employer with no carve-outs (CA a bit different)**
- **Incorporate claim elements suggested by individuals not named as inventors**

Conclusions

- **Most patents are worthless**
- **Building portfolios of related patents typically leads to greater value**
 - Develop inventions in-house
 - Outsource innovation but retain ownership
 - Acquire companies / portfolios
- **Patent owners should consider assertion as part of their overall strategy for monetizing their investments**

Patent Kinetics Assists Patent Owners By

- **Evaluating potential for**
 - Commercialization
 - Licensing
 - Sale
 - Assertion
- **Portfolio Triage**
 - The Good, The Bad, and the Ugly
 - The Valuable, the Worthless, and the Enhanceable
- **Brokering relationships / deals with licensees, acquirers, and patent assertion firms**

Contact Information

Robert P. Weber
Managing Director
Patent Kinetics, LLC
Skype: BobWeberBOS
Info@PatentKinetics.com
www.PatentKinetics.com