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Interdisciplinary Nanotechnology Commercialization: The Next Wave

Through the Eyes of a Patent Attorney

Presented by: Michael D. Specht

Washington Academy of Sciences Forum
Nanotechnology: An Interdisciplinary Endeavor
January 17, 2006

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Strategists and Advisors
specializing in the protection,
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Intellectual Property Rights.

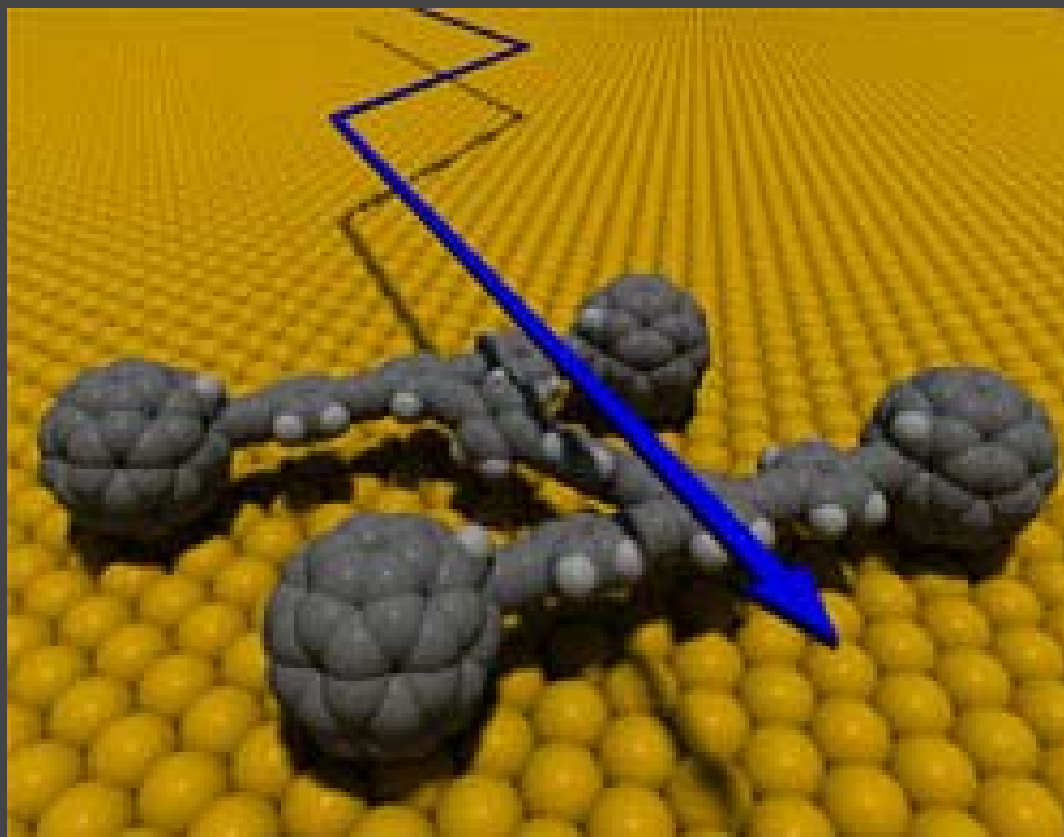
Nanotechnology Commercialization

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Nanotechnology Commercialization: Racing Forward?

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Credit: Y. Shira/Rice University

Nanotechnology Commercialization: Racing Forward?

“There tends to be a perception on the part of the public and many policymakers that nanotechnology is something in the far future. Our company, and others, prove that the technology and the associated business opportunities are here today.”

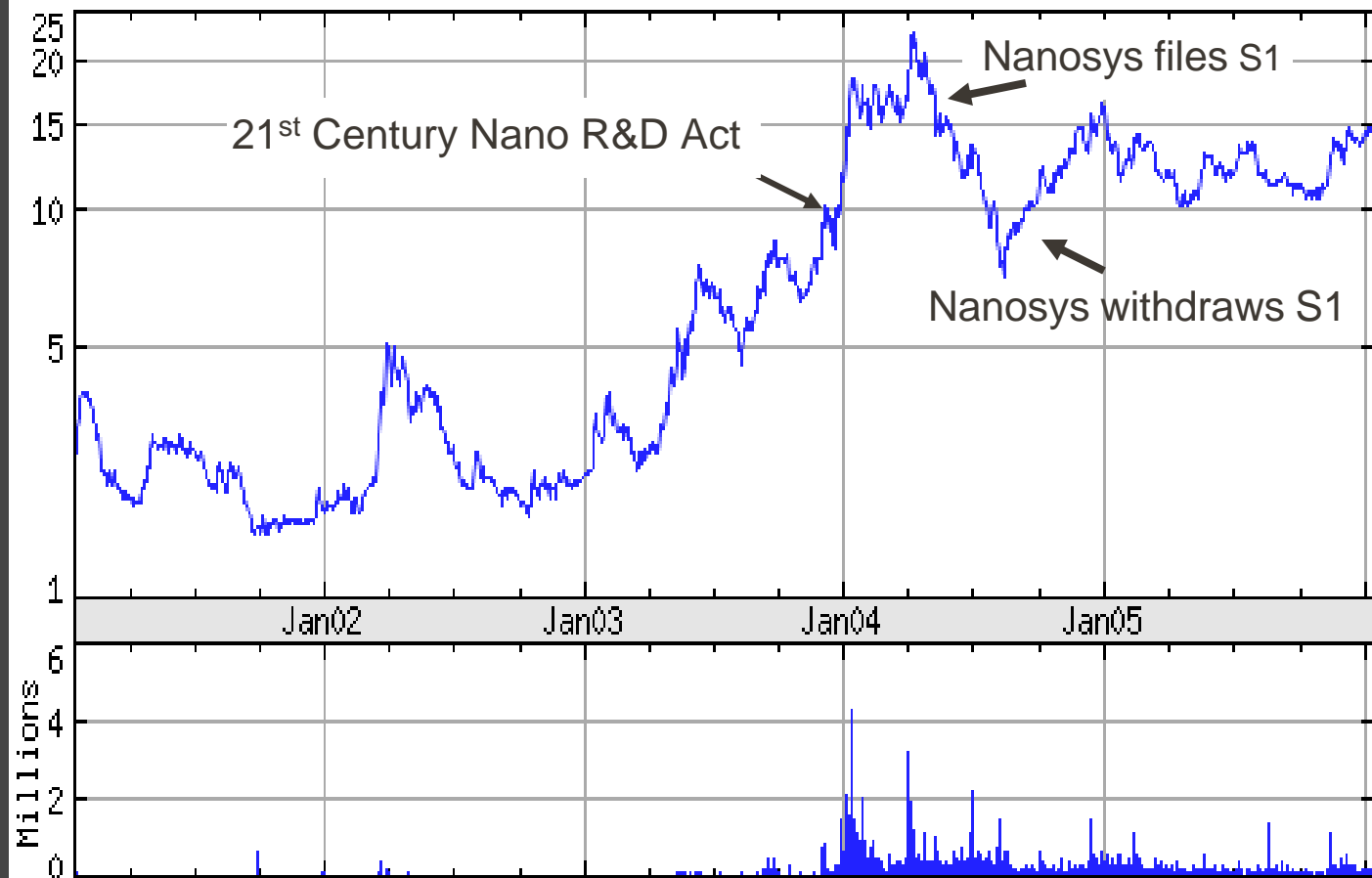
- Harris Goldberg,
President & CEO
Inmat

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Markets Measuring Nanotechnology

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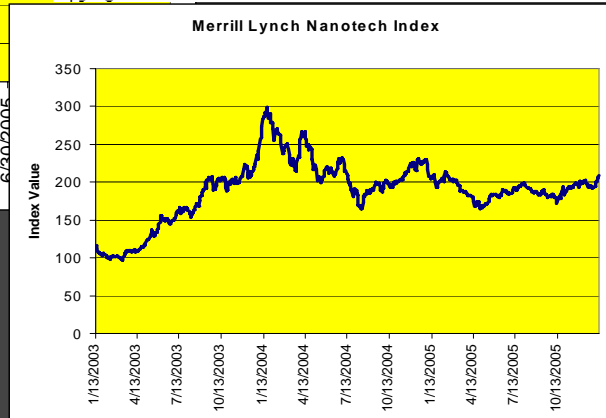
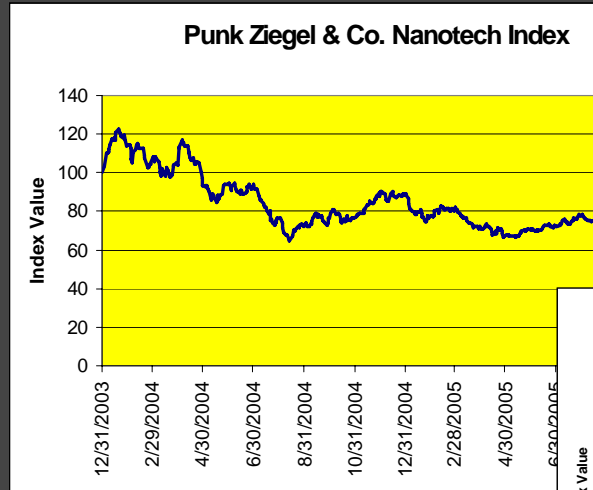
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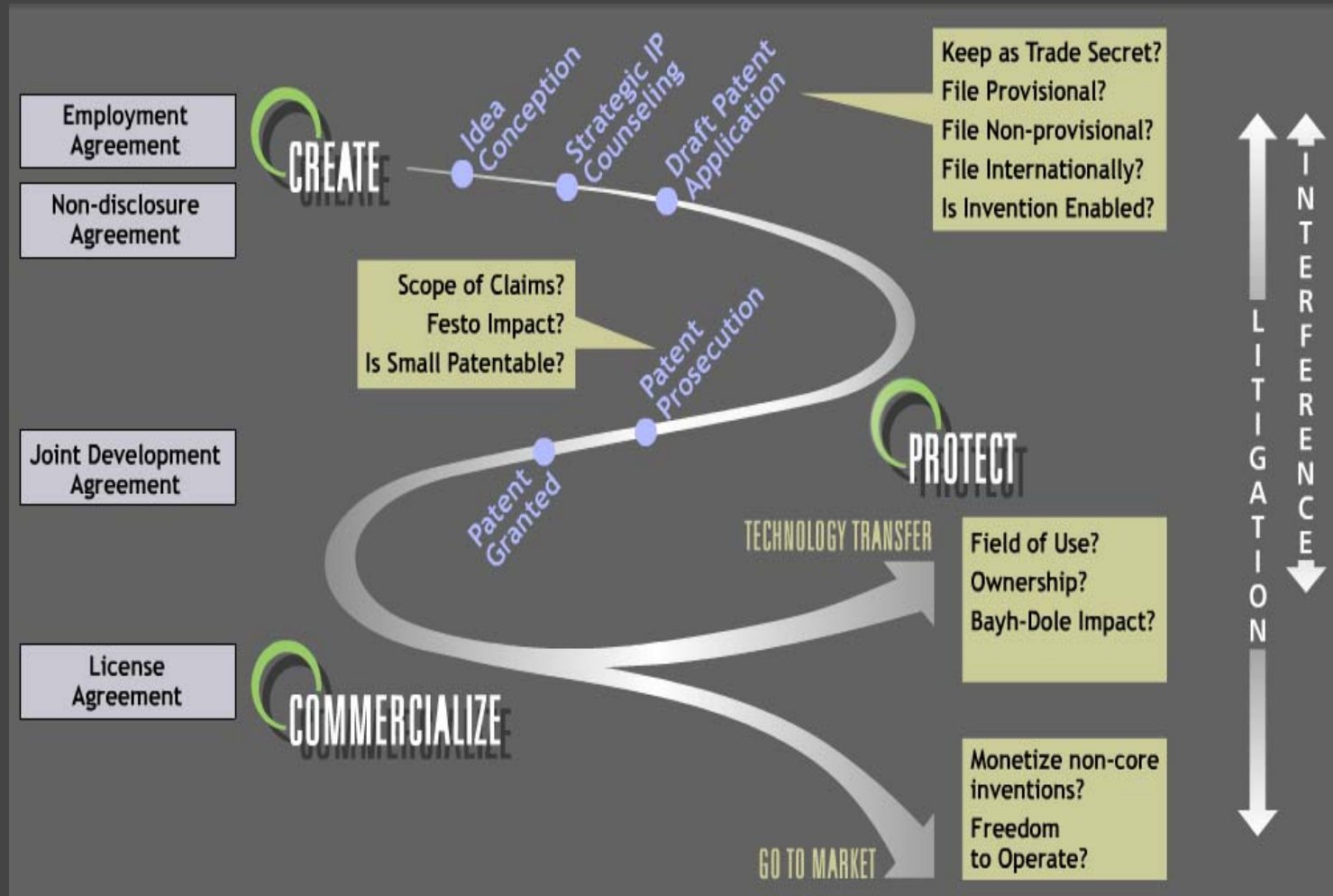
Need for Another View?

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A View of Commercialization Through Patent Activity

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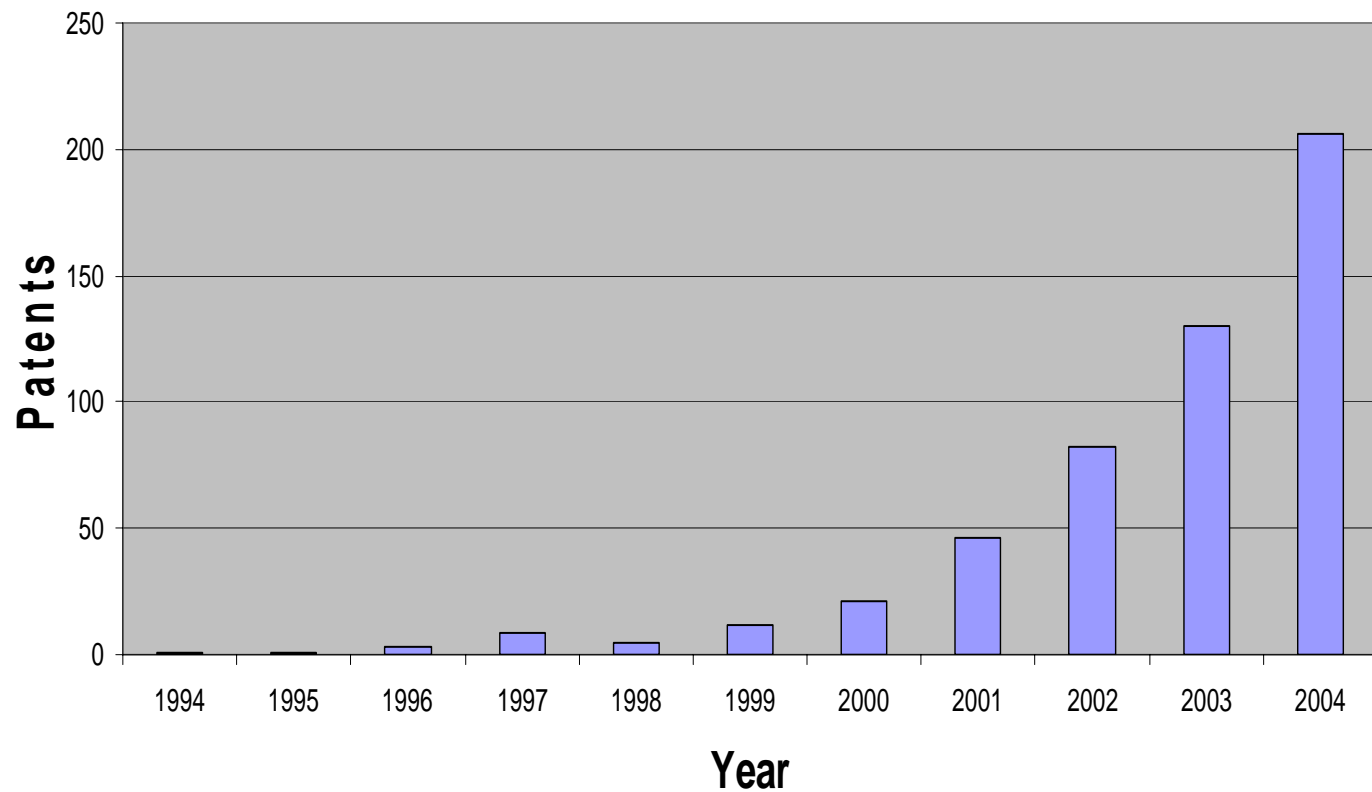
Commercialization Phases From a Patent Perspective (Simplified View)

- Create
 - Discovery and Invention Phase
- Protect
 - Patenting
- Commercialize
 - Licensing
 - Mergers & Acquisitions
 - Sales
 - Litigation

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A View of Commercialization Through Patent Activity

Nanotube Patents Issued by Year



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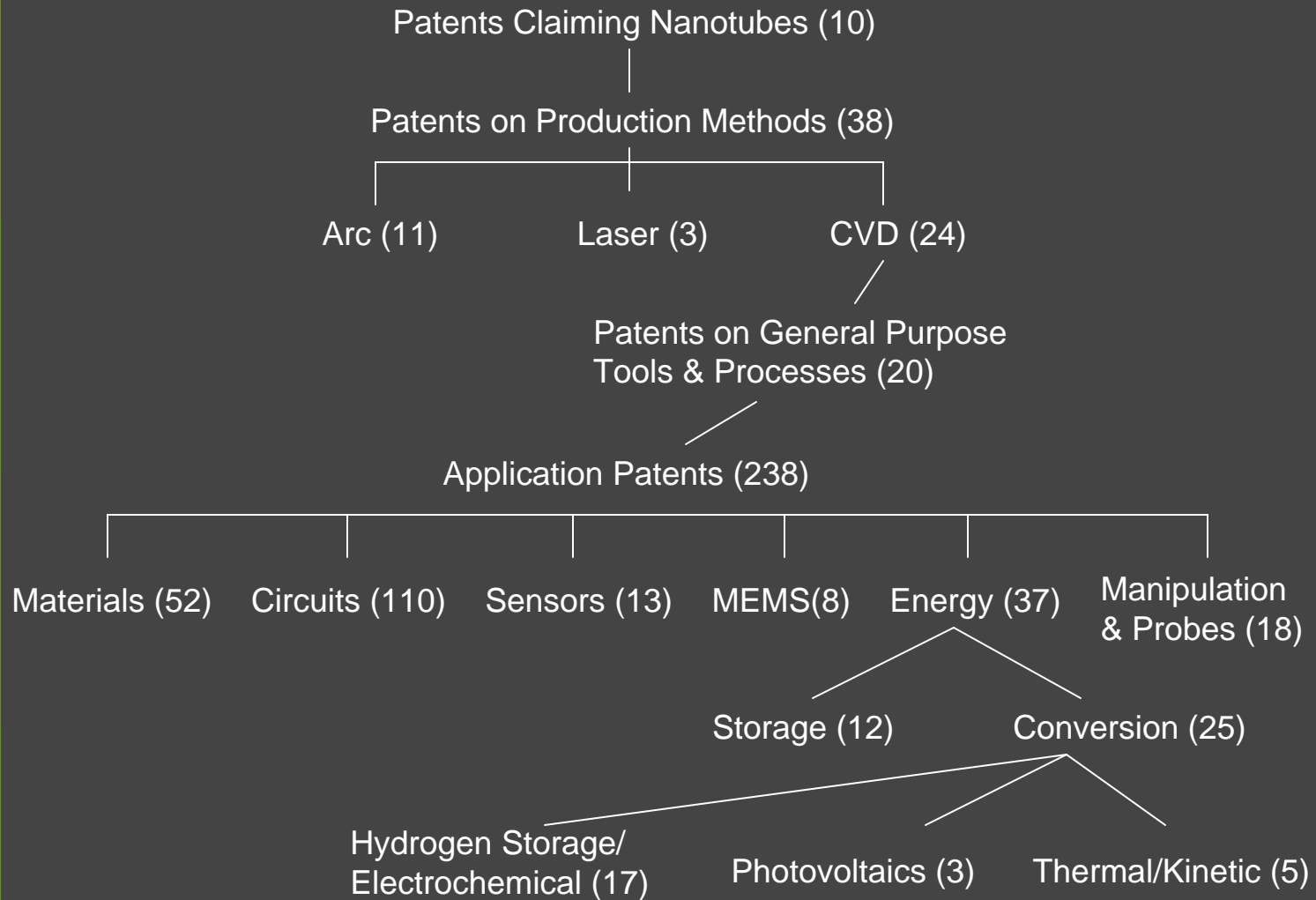
In Case of Doubt, Regarding the Interdisciplinary Nature of Nanotechnology

- 56 different patent classes
- Most common patent classes
 - 257 – Active Solid State Devices (17)
 - 313 – Electric Lamp & Discharge Devices (17)
 - 423 – Chemistry of Inorganic Compounds (23)
 - 438 – Semiconductor Device Manufacturing (23)
- 103 different art units
- 142 different examiners (109 examiners examined only one nanotube patent application)

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Commercialization: The Next Wave Nanotube Patent Landscape

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Commercialization: The Next Wave

- Licensing
- Mergers & Acquisitions
- Sales and Litigation

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Commercialization through the Patenting Crystal Ball

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- Extensive nanotech patenting will continue for at least several years (integration, nano-macro interfaces, manufacturing methods).
- Weak patent positions will be strengthened. Need bedrock foundation. (VCs demand it, Large companies understand it)
- Companies will continue to strengthen their commercialization position through licensing (university and company-company) and M&A.
- Patent litigation will mark the start of serious commercialization or vice versa.

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