

# IP ISSUES RELATED TO PIONEERING CHEMISTRY INVENTIONS

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## American Chemical Society

San Diego Section, Law Committee



Title: **IP Issues related to Pioneering Chemistry Inventions**  
Date/ Time: March 31, 2009/ 6-7 PM  
Speaker: Don Lewis, Catalyst Law Group  
Venue: Fishman Auditorium, Burnham Institute for Medical Research  
Sponsors: Margaret Dunbar and Craig Houser (BIMR)

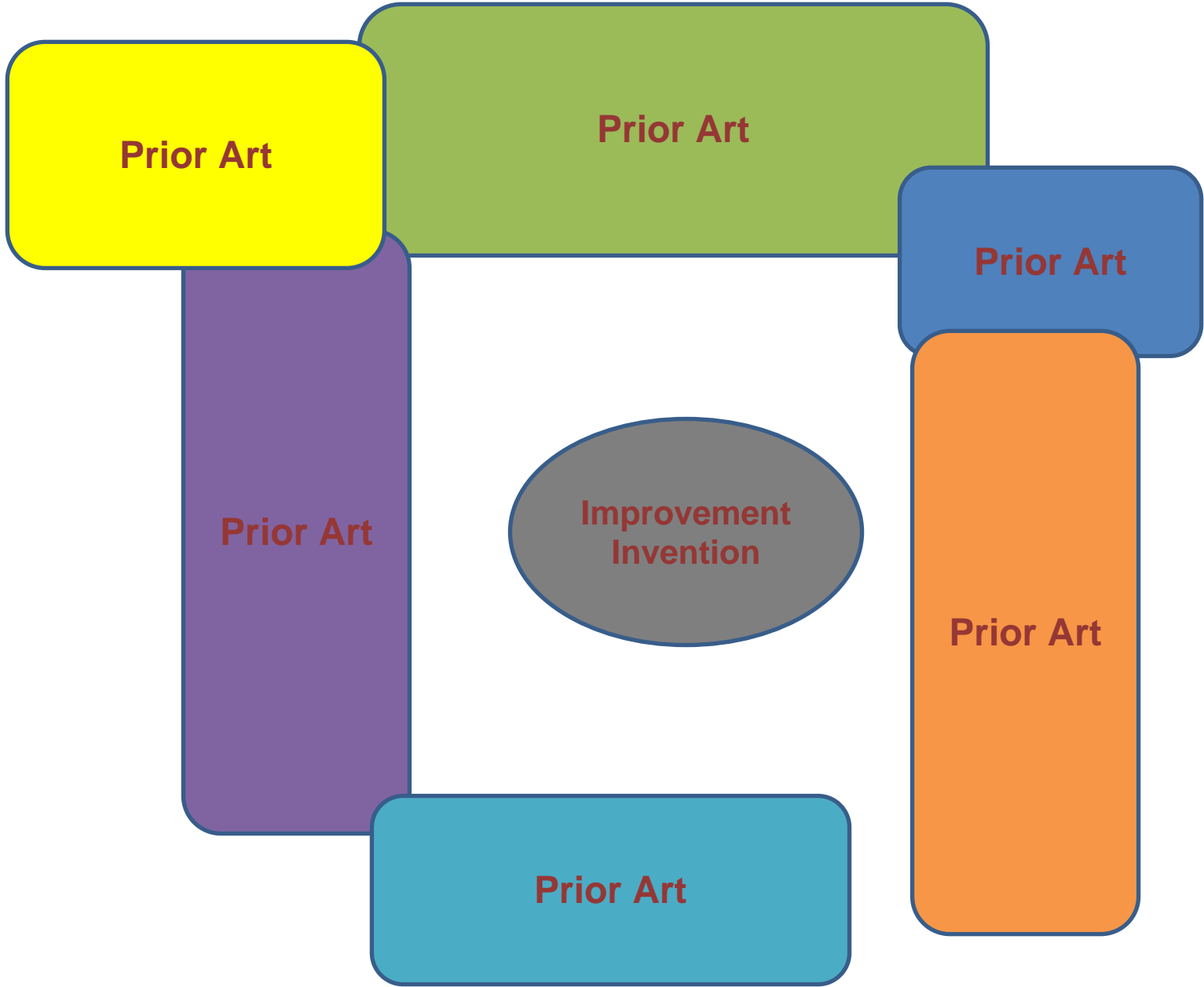
Attendee List:

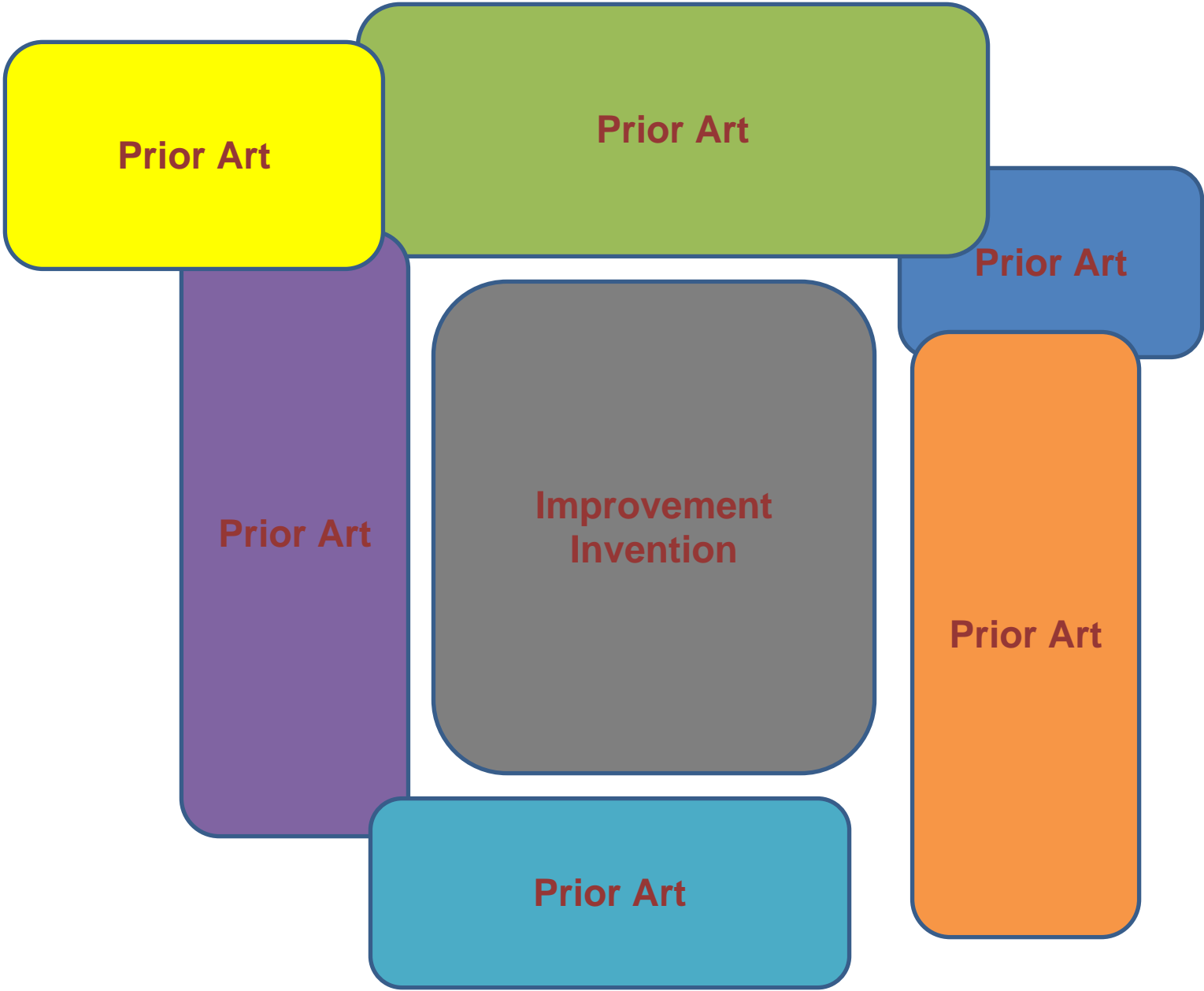
Kauser M. Akhoun, ACADIA Pharmaceuticals Inc  
Juan Betancort  
Margaret Dunbar, BIMR  
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David Kohn, Catalyst Law Group  
Rajeev Kumar  
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Marianne Patch  
Mike Smith, MOFO  
Tom Stockfisch  
David Wallace  
Julie Webb, Anadys Pharmaceuticals, Inc.  
James B. Wiesner  
Junhu Zhang, Triusrx

**Two Types of Invention:**

**Improvement Inventions**

**Pioneer Inventions**





**Prior Art**

**Prior Art**

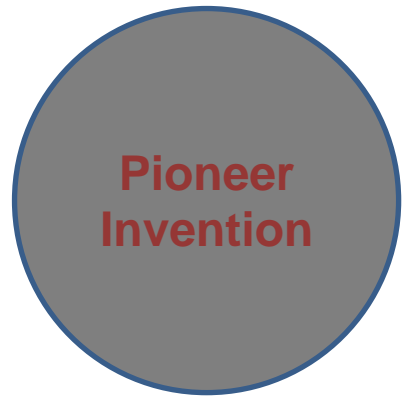
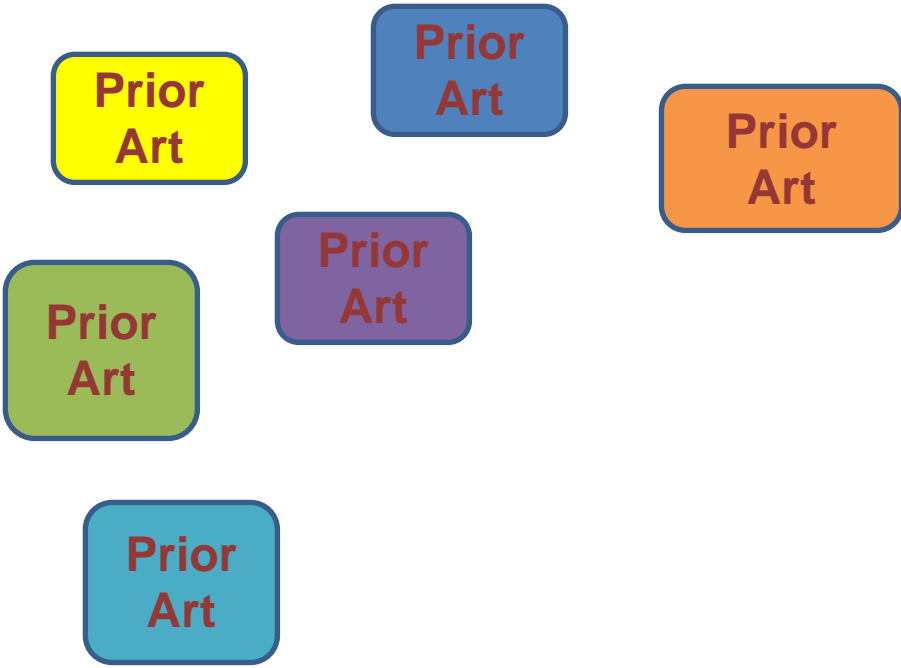
**Prior Art**

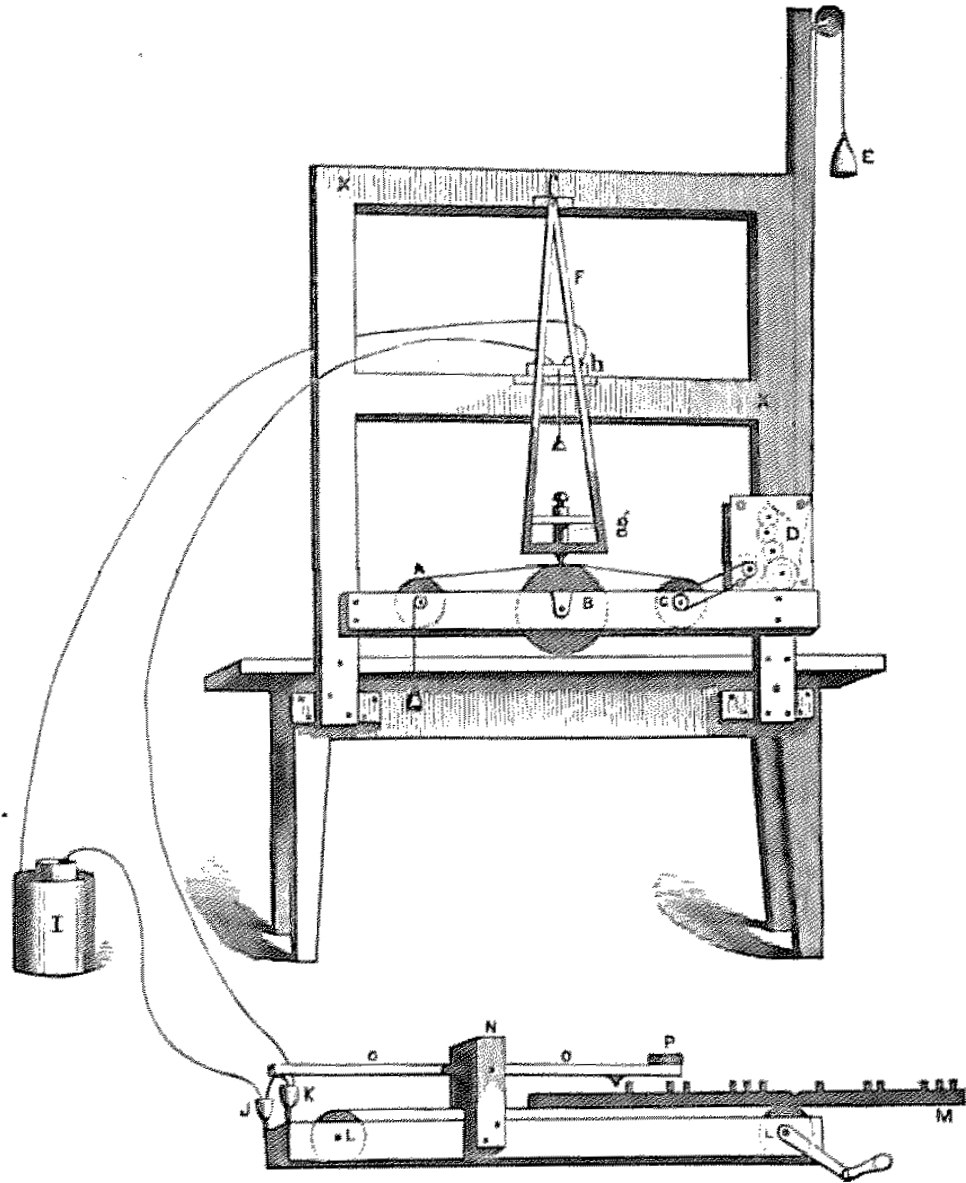
**Prior Art**

**Improvement  
Invention**

**Prior Art**

**Prior Art**





“Claim 8: I do not propose to limit myself to the specific machinery or parts of machinery described in the foregoing specification and claims; the essence of my invention being the use of the motive power of the electric or galvanic current, which I call electro magnetism, however developed for marking or printing intelligible characters, signs, or letters, at any distances, being a new application of that power of which I claim to be the first inventor or discoverer.”

US Patent No. 1647, Reissue #117

“He **claims the exclusive right to every improvement** where the motive power is the electric or galvanic current, and the result is the marking or printing intelligible characters, signs, or letters at a distance.

. . . . For aught that we now know, some future inventor, in the onward march of science, may discover a mode of writing or printing at a distance by means of the electric or galvanic current, **without using any part of the process or combination set forth in the plaintiff's specification.**

. . . For he says he **does not confine his claim to the machinery or parts of machinery, which he specifies;** but claims for himself a monopoly in its use, however developed, for the purpose of printing at a distance.

. . . And if he can secure the exclusive use by his present patent, he may vary it with every new discovery and development of the science, and **need place no description of the new manner, process, or machinery, upon the records of the patent office.**

. . . In fine, he claims an exclusive right to use a manner and process which **he has not described, and indeed had not invented, and therefore could not describe when he obtained his patent. The court is of opinion that the claim is too broad, and not warranted by law.”**

*(O'Reilly v. Morse, H15, p 412, Supreme Court of the United States, December Term 1853)*

What I specially claim as my invention and improvement is—

1. Making use of the motive power of magnetism when developed by the action of such current or currents, substantially as set forth in the foregoing description of the first principal part of my invention, as means of operating or giving motion to machinery which may be used to imprint signals upon paper or other suitable material, or to produce sounds in any desired manner for the purpose of telegraphic communication at any distances.

## **Definitions for 'Pioneer Invention':**

- 1. An invention that is very significant,  
opens new fields of research or endeavor  
or permits new industries to be founded.**
- 2. No different from Improvement Invention,  
except for an absence of prior art.**

## Requirements for Enforceability:

<b>Valid/ Infringed</b>	<b>Invalid/ Infringed</b>
<b>Valid/ Not Infringed</b>	<b>Invalid/ Not Infringed</b>

## Requirements for Validity:

1. Statutory Subject Matter
2. Novel
3. Unobvious or Inventive
4. Written Description

## Types of Infringement:

1. Literal Infringement
2. Substantial Equivalence

**All elements rule** requires that each element of a patent claim be infringed either literally or by an equivalent element found in the product

**Factors for finding literal infringement:**

1. Language of asserted claim
2. Specification
3. Prosecution history
4. Other claims in patent
5. Expert testimony

### **Doctrine of Equivalents:**

Substantial equivalence is found if a claim limitation differs insubstantially from the accused product or if the accused element performs the substantially same function in substantially the same way with substantially the same result (function/way/result test).

### **Prosecution History Estoppel:**

Vitiation and unclaimed subject matter

## **Presumptive Bar to Doctrine of Equivalents** **(Festo (2002), 535 U. S. 722):**

Where a claim is amended, the inventor is deemed to concede that the patent does not extend as far as the original claim. However, this presumption can be overcome if the patentee can establish that:

1. the equivalent was unforeseeable at the time the claim was drafted;
2. the amendment did not surrender the particular equivalent in question; or
3. there was some reason why the patentee could not have recited the equivalent in the claim.

**Equivalent Foreseeable if Disclosed in Relevant Art  
(Festo (2007), CAFC):**

“An equivalent is foreseeable if one skilled in the art would have known that the alternative existed in the field of art as defined by the original claim scope, even if the suitability of the alternative for the particular purposes defined by the amended claim scope were unknown.”

## **Summary:**

- 1. Inventions may be pioneer or improvement.**
- 2. Special rules apply to pioneer inventions that facilitate expanded claim scope.**
- 3. When drafting specification for pioneer invention, assert pioneer nature of invention and describe all foreseeable equivalents for each claim element.**
- 4. When drafting claims for pioneer invention, incorporate into base claim at least one structural / physical limitation that is both essential and invariant.**
- 5. Do not amend claims during prosecution.**