Patent Law

Prof. Roger Ford
February 17, 2016
Class 6
Novelty: introduction & anticipation

Recap

Recap

→ Definiteness background

→ *Nautilus v. Biosig*

→ Functional claiming

Today's agenda

Today's agenda

- → Novelty: introduction
- → Anticipation: the basics
- → Accidental anticipation

Novelty: introduction

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→ The patent bargain:

- In return for inventing something new and disclosing it to the world, the patent system grants a limited monopoly

Novelty: introduction

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- In return for inventing something new and disclosing it to the world, the patent system grants a limited monopoly

Novelty: introduction

→ So how do we tell if something isn't new enough to get a patent?

→ Three doctrines:

- Novelty – is there a single piece of prior art that anticipates the patented invention?
- Statutory bars – is there a single piece of prior art that came too soon before filing a patent?
- Obviousness – is there one or more pieces of prior art that render the invention obvious?

Novelty: introduction

→ Novelty as a three-step process:

- Figure out if something qualifies to be prior art under a subsection of § 102
- Figure out the timing: the effective date of the prior-art reference and the critical date of the patent
- Figure out if the information disclosed in the prior-art reference anticipates the patent claim(s)

Novelty: introduction

→ Novelty as a three-step process:

- *Note:* The test is not "is the invention new?"
- *Instead*: "Is there a particular piece of prior art that proves the invention is not new?"

Novelty: introduction

→ Terminology: reference = prior art

- Something predating the critical date
- In the public domain
- Can be anything: patent, scientific paper, physical product, newspaper article, &c

Novelty: introduction

→ Terminology: critical date

- Pre-AIA: date the invention was invented
  - Can be difficult to discern
  - Sometimes litigated
- Post-AIA: effective filing date

Novelty: introduction

→ Terminology: effective date of the reference

- When it entered the public domain
- Must come before critical date to be prior art
  - So if I write a paper, but never publish it, and then you invent the thing I described, you get the patent – does that make sense?

Novelty: introduction

→ Terminology: anticipation

- If a prior-art reference includes the claimed invention, it anticipates the claim
- A claim is "invalid by anticipation"
- Evaluated claim by claim

Novelty: introduction

→ Terminology: all-elements rule

- A single claim probably has several elements
- A single prior-art reference must have every single element to anticipate

Patent: iPod

Claim: A device for listening to digital music comprising a hard drive, a click wheel, interface software, and headphones

Patent: iPod

Claim: A device for listening to digital music comprising a hard drive, a click wheel, interface software, and headphones

Prior art #1: Nomad Jukebox

A device for listening to digital music with a hard drive, interface software, and headphones, but no click wheel

Patent: iPod

Claim: A device for listening to digital music comprising a hard drive, a click wheel, interface software, and headphones

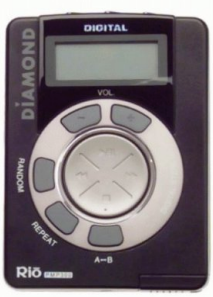
Prior art #2: Kenwood car stereo

A device for listening to digital music with interface software and a click wheel

Patent: iPod

Claim: A device for listening to digital music comprising a hard drive, a click wheel, interface software, and headphones

Prior art #3: Diamond Rio mp3 player



A device for listening to digital music with interface software and headphones, and (maybe) a hard drive and a click wheel

Patent: iPod	Nomad reference	Kenwood reference	Rio reference
A device for listening to digital music comprising:			
a hard drive,			
a click wheel,			
interface software,			
and headphones.			

Patent: iPod	Nomad reference	Kenwood reference	Rio reference
A device for listening to digital music comprising:	✔		
a hard drive,	✔		
a click wheel,	✘		
interface software,	✔		
and headphones.	✔		

Patent: iPod	Nomad reference	Kenwood reference	Rio reference
A device for listening to digital music comprising:	✔	✔	
a hard drive,	✔	✘	
a click wheel,	✘	✔	
interface software,	✔	✔	
and headphones.	✔	✘	

Patent: iPod	Nomad reference	Kenwood reference	Rio reference
A device for listening to digital music comprising:	✔	✔	✔
a hard drive,	✔	✘	? ? ?
a click wheel,	✘	✔	? ? ?
interface software,	✔	✔	✔
and headphones.	✔	✘	✔

Patent: iPod	Nomad reference	Kenwood reference	Rio reference
A device for listening to digital music comprising:	✔	✔	✔
a hard drive,	✔	✘	? ? ?
a click wheel,	✘	✔	? ? ?
interface software,	✔	✔	✔
and headphones.	✔	✘	✔

Novelty: introduction

→ Two parallel patent systems:

- Pre-AIA § 102: effective filing date before March 16, 2013
- Post-AIA § 102: effective filing date on or after March 16, 2013

(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

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, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States, or

* * *

(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

* * *

(e) the invention was described in — (1) an **application for patent**, published under section 122(b), by another **filed in the United States before the invention** by the applicant for patent or (2) a **patent granted on an application** for patent by another **filed in the United States before the invention** by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or

(f) he did not himself invent the subject matter sought to be patented, or

* * *

(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

* * *

(g) (1) during the course of an **interference** conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was **made by such other inventor and not abandoned, suppressed, or concealed**, or (2) before such person's invention thereof, the invention was **made in this country by another inventor who had not abandoned, suppressed, or concealed it**. In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Novelty: introduction

→ Novelty as a three-step process:

- Figure out if something qualifies to be prior art under a subsection of § 102
- Figure out the timing: the effective date of the prior-art reference and the critical date of the patent
- Figure out if the information disclosed in the prior-art reference anticipates the patent claim(s)

Novelty: introduction

→ Relevant prior-art references (pre-AIA):

- § 102(a): things "known or used by others in this country"
- § 102(a): "printed publication[s] in this or a foreign country"
- § 102(e)(1): "an application for patent, published under section 122(b), by another filed in the United States"
- § 102(e)(2): "a patent granted on an application for patent by another filed in the United States"
- § 102(e)(1) or (2): "an international application filed under the treaty defined in section 351(a) [when the application] designated the United States and was published under Article 21(2) of such treaty in the English language"

(post-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty

(a) Novelty; Prior Art.— A person shall be entitled to a patent unless—

(1) the claimed invention was **patented**, **described in a printed publication**, or **in public use, on sale, or otherwise available to the public** before the **effective filing date** of the claimed invention; or

(2) the claimed invention was **described in a patent issued under section 151**, or in an **application for patent published or deemed published under section 122(b)**, in which the patent or application, as the case may be, names **another inventor** and was **effectively filed before the effective filing date** of the claimed invention.

(b) Exceptions.—

* * *

Novelty: introduction

→ Novelty as a three-step process:

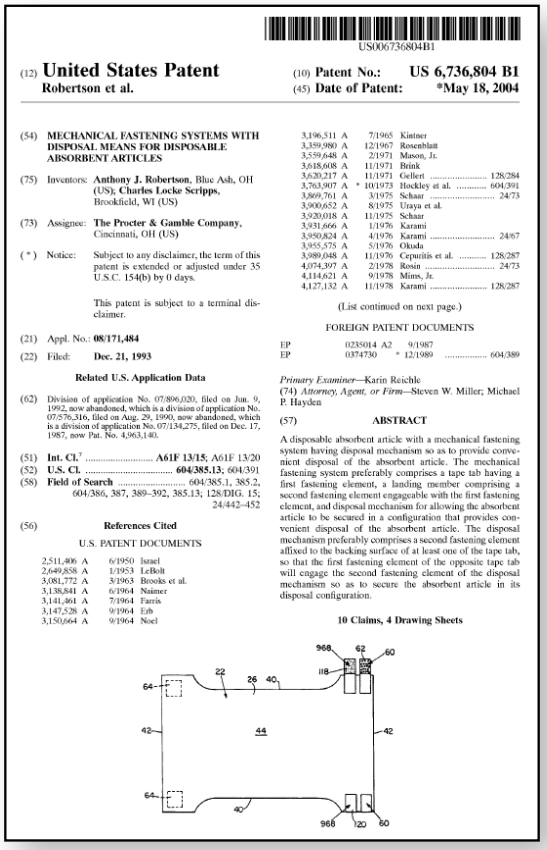
- Figure out if something qualifies to be prior art under a subsection of § 102
- Figure out the timing: the effective date of the prior-art reference and the critical date of the patent
- Figure out if the information disclosed in the prior-art reference anticipates the patent claim(s)

Novelty: introduction

→ Relevant prior-art references (post-AIA):

- § 102(a)(1): things "patented"
- § 102(a)(1): things "described in a printed publication
- § 102(a)(1): things "in public use, on sale, or otherwise available to the public"
- § 102(a)(2): "patent issued under section 151 … nam[ing] another inventor"
- § 102(a)(2): "application for patent published or deemed published under section 122(b) … nam[ing] another inventor"

Anticipation: the basics



US006736804B1

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

(10) **Patent No.: US 6,736,804 B1**
(45) **Date of Patent: *May 18, 2004**

(54) **MECHANICAL FASTENING SYSTEMS WITH DISPOSAL MEANS FOR DISPOSABLE ABSORBENT ARTICLES**

(75) Inventors: **Anthony J. Robertson**, Blue Ash, OH (US); **Charles Locke Scripps**, Brookfield, WI (US)

(73) Assignee: **The Procter & Gamble Company**, Cincinnati, OH (US)

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

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **08/171,484**

(22) Filed: **Dec. 21, 1993**

Related U.S. Application Data

(62) Division of application No. 07/896,020, filed on Jun. 9, 1992, now abandoned, which is a division of application No. 07/576,316, filed on Aug. 29, 1990, now abandoned, which is a division of application No. 07/134,275, filed on Dec. 17, 1987, now Pat. No. 4,963,140.

(51) **Int. Cl.**[7] **A61F 13/15**; A61F 13/20

(52) **U.S. Cl.** **604/385.13**; 604/391

(58) **Field of Search** 604/385.1, 385.2, 604/386, 387, 389–392, 385.13; 128/DIG. 15, 24/442–452

(56) **References Cited**

U.S. PATENT DOCUMENTS

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3,081,772	A	3/1963	Brooks et al.	
3,138,841	A	6/1964	Naimer	
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Primary Examiner—Karin Reichle
(74) *Attorney, Agent, or Firm*—Steven W. Miller; Michael P. Hayden

(57) **ABSTRACT**

A disposable absorbent article with a mechanical fastening system having disposal mechanism so as to provide convenient disposal of the absorbent article. The mechanical fastening system preferably comprises a tape tab having a first fastening element, a landing member comprising a second fastening element engageable with the first fastening element, and disposal mechanism for allowing the absorbent article to be secured in a configuration that provides convenient disposal of the absorbent article. The disposal mechanism preferably comprises a second fastening element affixed to the backing surface of at least one of the tape tab, so that the first fastening element of the opposite tape tab will engage the second fastening element of the disposal mechanism so as to secure the absorbent article in its disposal configuration.

10 Claims, 4 Drawing Sheets

U.S. Patent No. 6,736,804

→ "Mechanical fastening systems with disposal means for disposable absorbent articles"

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

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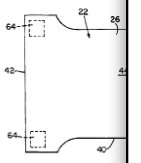

1. A disposable absorbent article comprising:

a body portion comprising a backsheet, an absorbent core, and a topsheet, said body portion having a first end region, a second end region opposite of said first end region, an inside surface, an outside surface opposite of said inside surface, longitudinal edges, and end edges;

a mechanical fastening system for forming side closures such that said first end region and said second end region are in an overlapping configuration when worn, said mechanical fastening system comprising

a closure member disposed adjacent each longitudinal edge of said body portion in said first end region, each said closure member comprising a first mechanical fastening means for forming a closure, said first mechanical fastening means comprising a first fastening element;

a landing member disposed on said body portion in said second end region, said landing member comprising a second mechanical fastening means for forming a closure with said first mechanical fastening means, said second mechanical fastening means comprising a second fastening element mechanically engageable with said first fastening element; and

disposal means for allowing the absorbent article to be secured in a disposal configuration after use, said disposal means comprising a third mechanical fastening means for securing the absorbent article in the disposal configuration, said third mechanical fastening means comprising a third fastening element mechanically engageable with said first fastening element, said third fastening element being positioned on said body portion said outside surface in said first end region.

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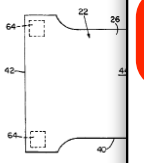
a body portion comprising a backsheet, an absorbent core, and a topsheet, said body portion having a first end region, a second end region opposite of said first end region, an inside surface, an outside surface opposite of said inside surface, longitudinal edges, and end edges;

a mechanical fastening system for forming side closures such that said first end region and said second end region are in an overlapping configuration when worn, said mechanical fastening system comprising

a closure member disposed adjacent each longitudinal edge of said body portion in said first end region, each said closure member comprising a first mechanical fastening means for forming a closure, said first mechanical fastening means comprising a first fastening element;

a landing member disposed on said body portion in said second end region, said landing member comprising a second mechanical fastening means for forming a closure with said first mechanical fastening means, said second mechanical fastening means comprising a second fastening element mechanically engageable with said first fastening element; and

disposal means for allowing the absorbent article to be secured in a disposal configuration after use, said disposal means comprising a third mechanical fastening means for securing the absorbent article in the disposal configuration, said third mechanical fastening means comprising a third fastening element mechanically engageable with said first fastening element, said third fastening element being positioned on said body portion said outside surface in said first end region.



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Robertson claim	Wilson reference
1. A disposable absorbent article comprising:	
a body portion comprising a backsheet, an absorbent core, and a topsheet, said body portion having a first end region, a second end region opposite of said first end region, an inside surface, an outside surface opposite of said inside surface, longitudinal edges, and end edges;	
a mechanical fastening system for forming side closures such that said first end region and said second end region are in an overlapping configuration when worn, said mechanical fastening system comprising	
a closure member disposed adjacent each longitudinal edge of said body portion in said first end region, each said closure member comprising a first mechanical fastening means for forming a closure, said first mechanical fastening means comprising a first fastening element;	
a landing member disposed on said body portion in said second end region, said landing member comprising a second mechanical fastening means for forming a closure with said first mechanical fastening means, said second mechanical fastening means comprising a second fastening element mechanically engageable with said first fastening element; and	
disposal means for allowing the absorbent article to be secured in a disposal configuration after use, said disposal means comprising a third mechanical fastening means for securing the absorbent article in the disposal configuration, said third mechanical fastening means comprising a third fastening element mechanically engageable with said first fastening element, said third fastening element being positioned on said body portion said outside surface in said first end region.	

Robertson claim	Wilson reference
1. A disposable absorbent article comprising:	
First mechanical fastening means	
Second mechanical fastening means	
Third mechanical fastening means	
[Other]	

In re Robertson

→ Prior art:

- Snaps to fasten the diaper on the wearer
- No separate third fastening means, BUT:
- Patent suggests you can re-use the snaps to roll up the diaper for disposal

In re Robertson

→ What's the disagreement between the majority and Judge Rader?

In re Robertson

→ What's the disagreement between the majority and Judge Rader?

- Majority: the third fastening means must be separate from the first and second fastening means
- Rader: third fastening means could be the same physical fastener as the first or second fastening means

Robertson claim	Wilson (majority)
1. A disposable absorbent article comprising:	✔
First mechanical fastening means	✔
Second mechanical fastening means	✔
Third mechanical fastening means	✘
[Other]	✔

Robertson claim	Wilson (Rader)
1. A disposable absorbent article comprising:	✔
First mechanical fastening means	✔
Second mechanical fastening means	✔
Third mechanical fastening means	✔
[Other]	✔

In re Robertson

→ But so the reference mentions "secondary load-bearing closure means" – could that be the third means?

In re Robertson

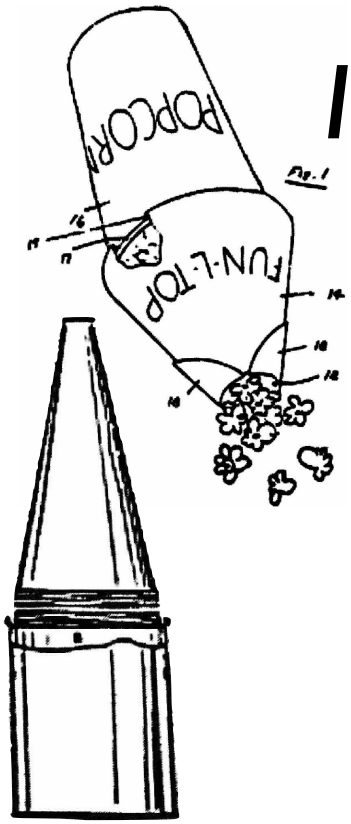
→ But so the reference mentions "secondary load-bearing closure means" – could that be the third means?

- Maybe, but not "necessarily" – anticipation must be absolutely present in the prior art

In re Robertson

→ Is this too narrow a test?

- "That which would literally infringe if later in time anticipates if earlier than the date of the invention." *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 747 (Fed. Cir. 1987)

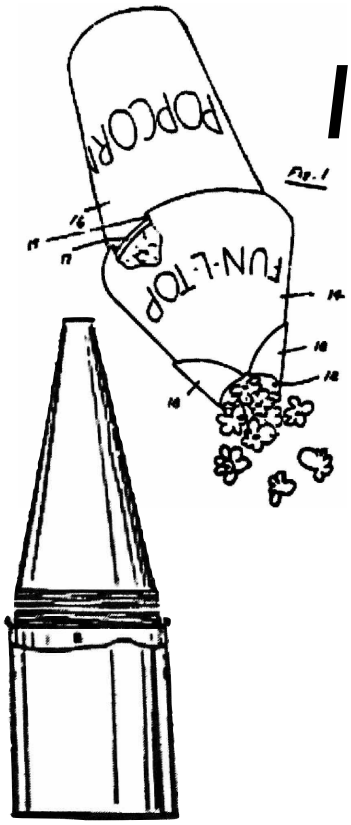


In re Schreiber

→ Technology?

→ Prior art?

→ So is it anticipated?



In re Schreiber

→ Technology?

→ Prior art?

→ So is it anticipated?

- What's the real invention?
- Putting a cone on something to slow the dispense rate?
- Doing this for popcorn?

Accidental anticipation

In re Seaborg

→ Invention?

→ Uses?

→ Natural product?

In re Seaborg

→ So is it anticipated?

- Fermi's prior-art reactor: must have produced this stuff, even if no one realized
- But would have made 6×10^{-9} grams, in tons of other material
- What if Fermi had intended to produce americium and tried to patent it?

In re Seaborg

→ Discussion question: What outcome is most consistent with the patent bargain?

In re Seaborg

→ Discussion question: What outcome is most consistent with the patent bargain?

- Who really invented americium?
- Who contributed something to society?
- What about people using the Fermi reactor?

Schering v. Geneva Pharmaceuticals

→ Two patents:

- '233 (on loratadine / Claratin)
- '716 (on DCL, a metabolite of Claratin)

→ Discussion question: What's the point of the '716 patent?

Schering v. Geneva Pharmaceuticals

→ Two patents:

- '233 (on loratadine / Claratin)
- '716 (on DCL, a metabolite of Claratin)

→ Discussion question: What's the point of the '716 patent?

- Evergreening

Schering v. Geneva Pharmaceuticals

→ So is DCL novel?

- Was produced in the body
- ...but no one knew
- ...but, it was detectable and necessarily made, as part of the process of using Claratin

"Where … the result is **a necessary consequence of what was deliberately intended**, it is of no import that the article's authors did not appreciate the result."

Schering, casebook at 360 (citing and quoting *MEHL/Biophile Int'l Corp. v. Milgraum,* 192 F.3d 1362, 1366 (Fed. Cir. 1999))

"[I]f granting patent protection on the disputed claim would allow the patentee to **exclude the public from practicing the prior art**, then the claim is anticipated."

Schering, casebook at 361 (citing and quoting *Atlas Powder Co. v. IRECO Inc.,* 190 F.3d 1342, 1346 (Fed. Cir. 1999))

Schering v. Geneva Pharmaceuticals

→ Discussion question: Is this the best outcome, normatively?

Schering v. Geneva Pharmaceuticals

→ Discussion question: Is this the best outcome, normatively?

- Yes, at least if we construe the claim to cover the existence of DCL in the body
- Would withdraw Claratin from public domain
- "That which would literally infringe if later in time anticipates if earlier than the date of the invention." *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 747 (Fed. Cir. 1987)

Schering v. Geneva Pharmaceuticals

→ Consistent with *Seaborg*?

Schering v. Geneva Pharmaceuticals

→ Consistent with *Seaborg*?

- *Seaborg* may be a one-off: no way to make use the invention, because the atoms are so dispersed
- Detectable versus detected?
- Maybe *Seaborg* is just wrong

Schering v. Geneva Pharmaceuticals

→ So, let's take stock

- Did Schering know about DCL at the time it got the '233 patent?
- Could it have gotten a patent on DCL at that point?
- Would anyone have known how to make DCL from the '233 patent?

Schering v. Geneva Pharmaceuticals

→ Schering's options?

- Patent DCL in pure form?
- Patent process of making DCL?
- Patent therapeutic uses of DCL?
- But do these help?

Next time

Next time

→ Novelty: public knowledge, use, and publication