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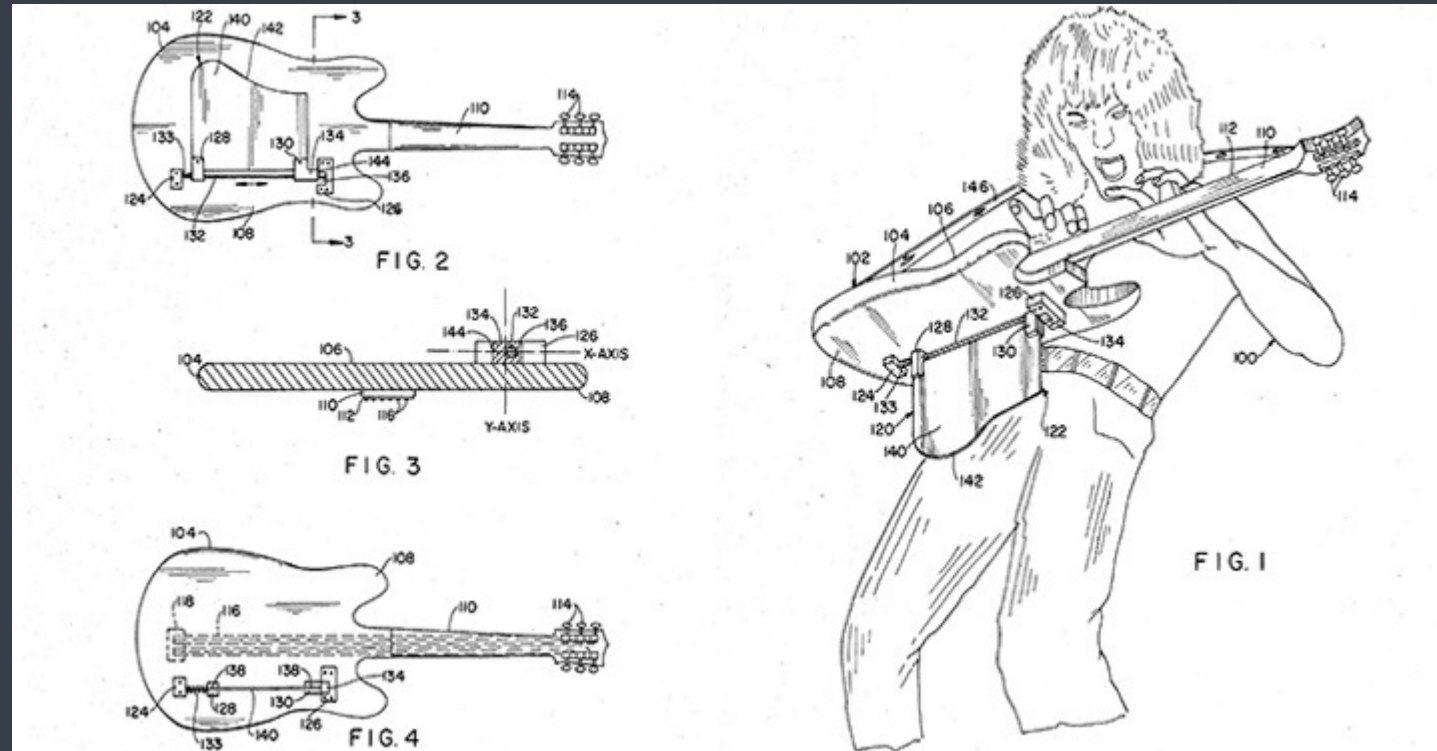
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Recent CAFC Case Law Summary

Claim Construction and Related Issues

Ice Breaker

- What is this a patent for, and for bonus points who was the inventor?



Ice Breaker



United States Patent [19] [11] **Patent Number:** **4,656,917**
Van Halen [45] **Date of Patent:** **Apr. 14, 1987**

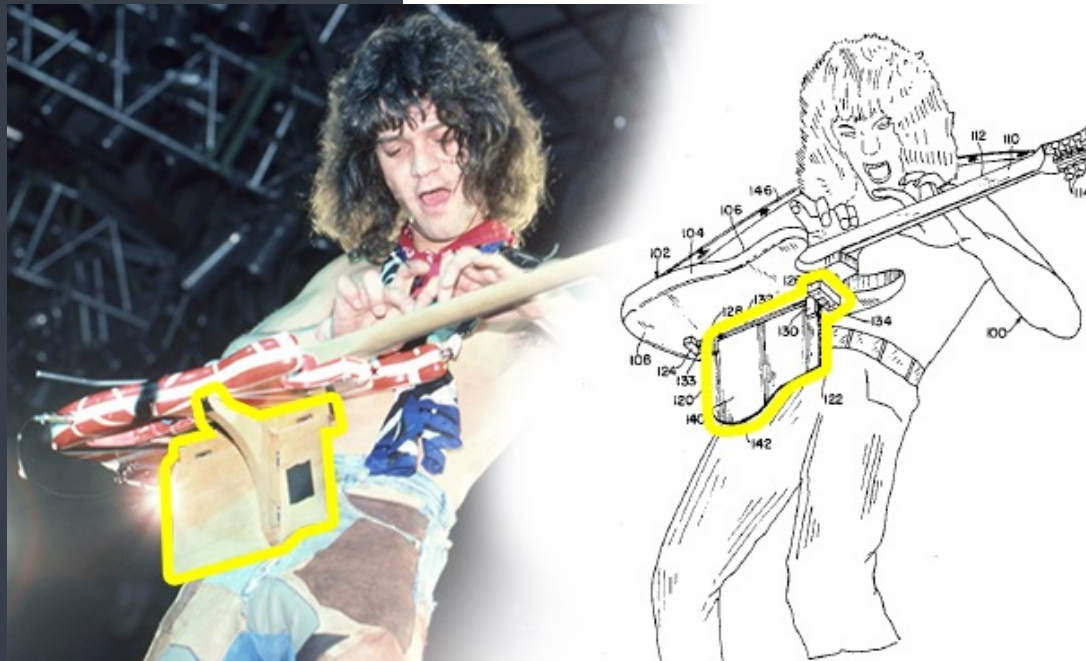
[54] **MUSICAL INSTRUMENT SUPPORT**
[76] **Inventor:** **Edward L. Van Halen**, 1900 Ave. of Stars #1780, Los Angeles, Calif. 90067
[21] **Appl. No.:** **760,598**
[22] **Filed:** **Jul. 30, 1985**
[51] **Int. Cl. 4** **G10G 5/00**
[52] **U.S. Cl.** **84/327; 224/910**
[58] **Field of Search** **84/327, 453, 267, 280, 84/411, 421; 224/910; 248/444, 371, 443**

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3,979,993 9/1976 Proctor 84/453
4,213,369 7/1980 Swartwout .

Primary Examiner—S. J. Witkowski
Assistant Examiner—David Warren
Attorney, Agent, or Firm—Lerner, David, Littenberg, Krumholz & Mentlik

[57] **ABSTRACT**
A supporting device for stringed musical instruments, for example, guitars, banjos, mandolins and the like, is disclosed. The supporting device is constructed and arranged for supporting the musical instrument on the player to permit total freedom of the player's hands to play the instrument in a completely new way, thus allowing the player to create new techniques and sounds previously unknown to any player. The device, when in its operational position, has a plate which rests upon the player's leg leaving both hands free to explore the musical instrument as never before. Because the musical instrument is arranged perpendicular to the player's body, the player has maximum visibility of the instrument's entire playing surface.

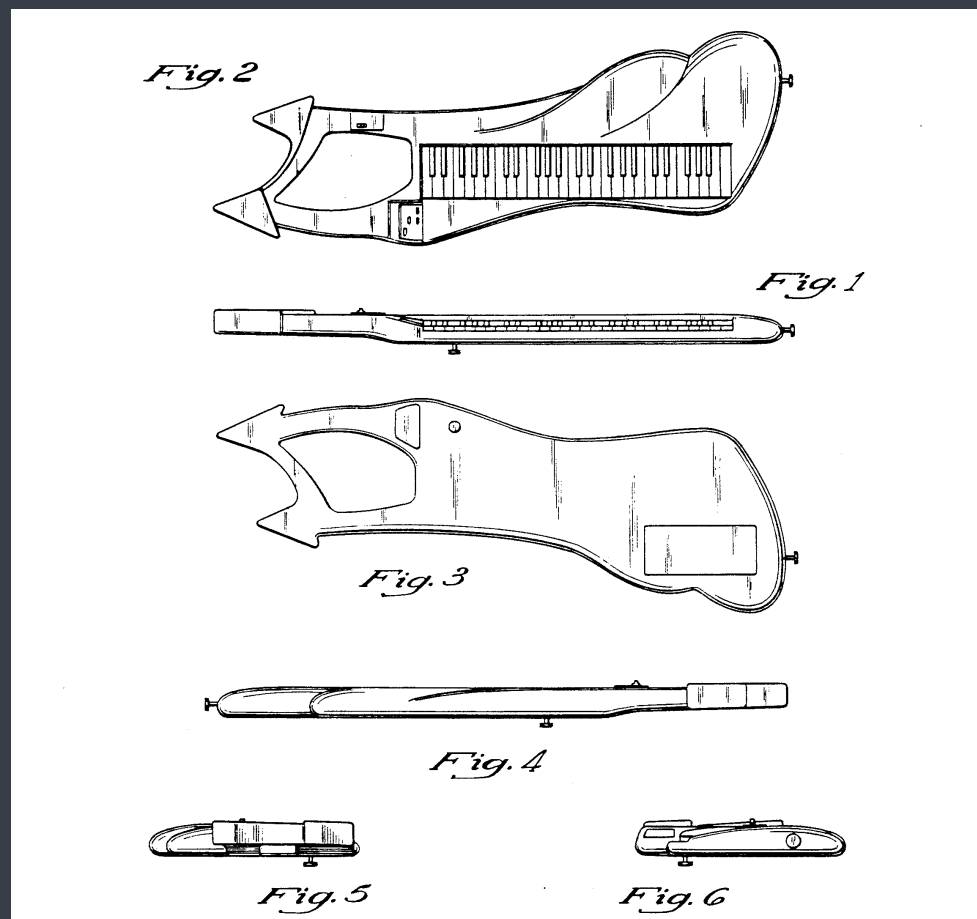
22 Claims, 4 Drawing Figures



1. A stringed musical instrument comprising an instrument body having front and rear surfaces, sound producing means extending over a portion of said front surface, and a device mounted onto said rear surface for positioning said instrument body at an angular orientation to a player's body, said device including attachment means movable between an inoperative position overlying said rear surface and an operative position at an angle to said rear surface, a pair of spaced-apart mounting blocks attached to said rear surface and support means coupled to said mounting blocks for rotationally supporting therebetween said attachment means, said attachment means engaging said player's body when in said operative position for maintaining said instrument body in said angular orientation and disengaging from said player's body when in said inoperative position for maintaining said instrument body in other than said angular orientation.

Ice Breaker

- What is this a patent for, and for bonus points who was the inventor?



Ice Breaker



United States Patent [19] Nelson



US00D349127S

[11] Patent Number: Des. 349,127

[45] Date of Patent: Jul. 26, 1994

[54] PORTABLE, ELECTRONIC KEYBOARD
MUSICAL INSTRUMENT

[75] Inventor: Prince R. Nelson, Chanhassen, Minn.

[73] Assignee: Prince Rogers Nelson, Chanhassen,
Minn.

[**] Term: 14 Years

[21] Appl. No.: 821,470

[22] Filed: Jan. 16, 1992

[52] U.S. Cl. D17/1

[58] Field of Search 84/423 R, 719, 723,
84/743, 744, 670, 718; D17/1, 2, 5, 7, 9

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OTHER PUBLICATIONS

The Music Trades, Dec. 1987, p. 122 (Yamaha's SHS-1 Keyboard).

Hong Kong Enterprise Oct. 1989, p. 229.

Primary Examiner—Bernard Ansher
Assistant Examiner—Adir Aronovich
Attorney, Agent, or Firm—Drucker & Sommers

[57] CLAIM

The ornamental design for portable electronic keyboard musical instrument, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a portable electronic keyboard musical instrument showing my new design;

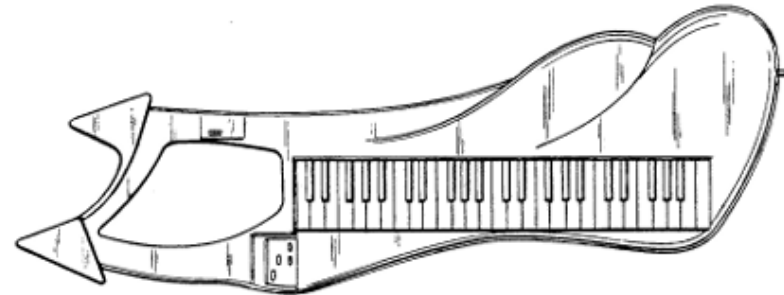
FIG. 2 is a top plan view thereof;

FIG. 3 is a bottom plan view thereof;

FIG. 4 is a rear view thereof;

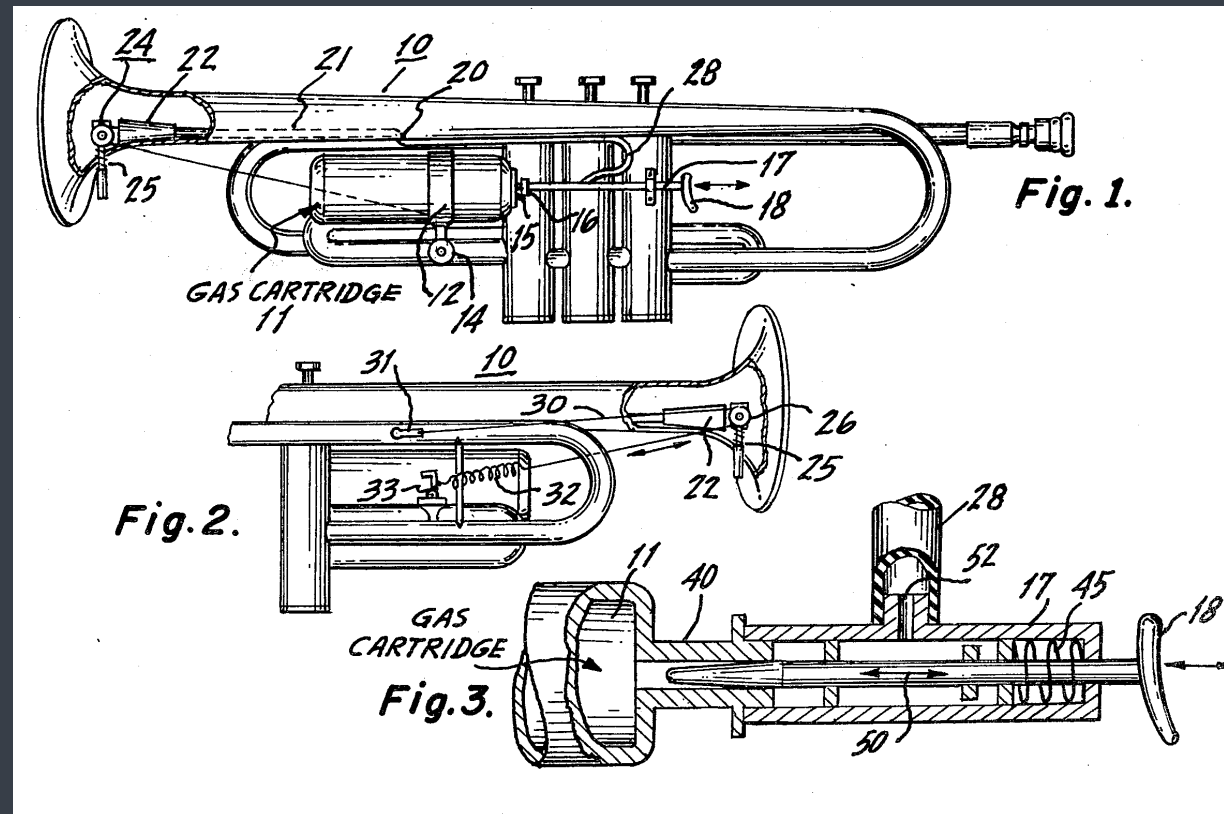
FIG. 5 is a first end view of my new design, which is a left end view of FIG. 1; and,

FIG. 6 is a second end view of my new design, which is a right end view of FIG. 1.

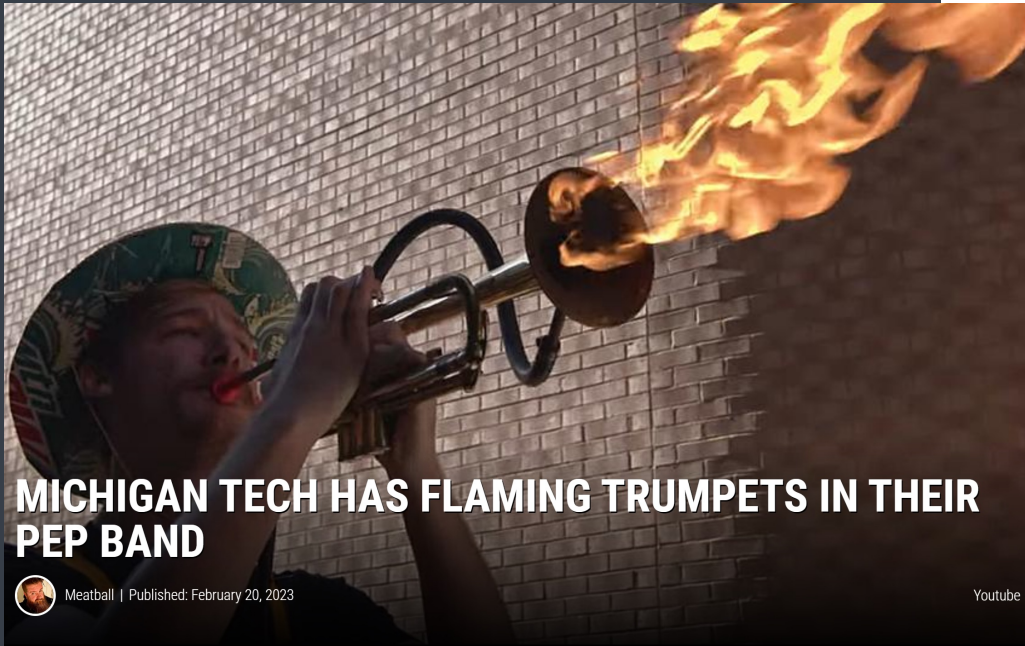


Ice Breaker

- What is this a patent for?



Ice Breaker



MICHIGAN TECH HAS FLAMING TRUMPETS IN THEIR PEP BAND

Meatball | Published: February 20, 2023

Youtube

United States Patent [19]

[11] 4,247,283

Vidas

[45] Jan. 27, 1981

[54] MUSICAL INSTRUMENT ADAPTED TO EMIT A CONTROLLED FLAME

[76] Inventor: Pat Vidas, 3778 Dunhill Rd., Wantagh, N.Y. 11793

[21] Appl. No.: 49,466

[22] Filed: Jun. 18, 1979

[51] Int. Cl.³ F23Q 2/32; A63J 17/00

[52] U.S. Cl. 431/253; 431/1; 431/125; 84/388; 84/453; 84/464 R

[58] Field of Search 431/1, 125, 252, 253; 84/387, 388, 453, 464, 464 A; 239/211, 289

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| 392,192 | 11/1888 | Ellis et al. | 431/125 |
| 1,602,710 | 10/1926 | Saunders | 84/464 A X |
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| 3,565,337 | 2/1971 | Ditto | 431/125 X |

FOREIGN PATENT DOCUMENTS

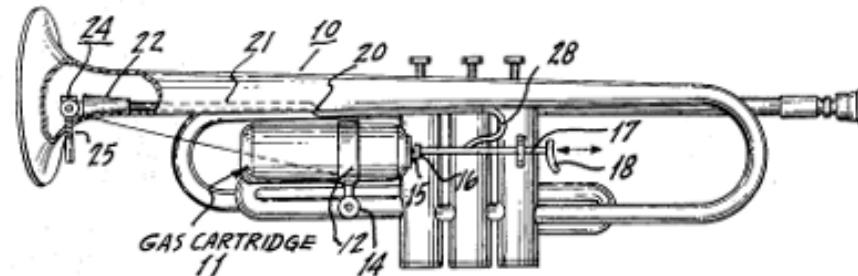
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|--------|--------|----------------------------|---------|
| 60212 | 7/1913 | Austria | 431/125 |
| 592720 | 2/1934 | Fed. Rep. of Germany | 431/125 |
| 843931 | 8/1960 | United Kingdom | 431/125 |

Primary Examiner—Robert S. Ward, Jr.
Attorney, Agent, or Firm—Arthur L. Plevy

[57] ABSTRACT

A flaming trumpet or a musical instrument which emits a flame under the control of the musician playing the instrument. The intensity and duration of the flame are controlled by the musician activating a control valve which controls the amount of gas emanating from a cartridge mounted on the instrument. The gas is directed through tubing so that it emanates from the flared end of the instrument and is ignited by means of a spark mechanism which is operated by the musician.

10 Claims, 3 Drawing Figures





Overview

Three 2022 CAFC cases related to claim construction

- Michael Kaufman v. Microsoft Corp. (Fed. Cir. 2022)
- Best Medical International v. Elekta Inc (Fed. Cir. 2022)
- Finjan LLC v. ESET LLC (Fed. Cir. 2022)

Michael Kaufman v. Microsoft Corp. (Fed. Cir. 2022)



- Kaufman US 7,885,981 has a 2000 priority date
 - Kaufman sued Microsoft for infringement and was awarded \$7M in damages
 - Both parties appealed
 - Infringement was affirmed
- Kaufman claims a method for “automatically generating an end-user interface” for a database using a server
 - The term “automatic” only appears in the preamble
 - During claim construction, there was a disagreement about which parts of the process had to be automatic, but that was “resolved.” On Appeal, Microsoft argued that claim construction should have been better resolved, but the Federal Circuit refused to consider the argument, holding that Microsoft failed to preserve the issue.

Michael Kaufman v. Microsoft Corp. (Fed. Cir. 2022) (con't)



“And” can include “or”!
At least, sometimes...

- Microsoft argued that its product required substantial user input, and was therefore not automatic
 - Federal Circuit found that the claim language permitted some human actions
- Microsoft also argued that it does not infringe, since its product has modes that do not include all the processes recited
 - The claims recite a set of modes for interacting with a database table including “create, retrieve, update and delete.” The claims also recite that “each said mode display processes for representing, navigating, and managing” data relationships.
- District court concluded that the term “and” should be construed as including “or.”
- On appeal, the CAFC affirmed, noting that the spec repeatedly used the word “and” in ways that clearly included “or”
 - “the sole embodiment described in the ’981 patent specification, the SCHEMALIVE™ program, does not include a process for “managing said relationships across tables... Thus, we evaluate the claim language with a strong presumption that it encompasses the situation where a mode display integrates some, but not all, of the enumerated processes.”
 - “We held that we were not required to “interpret and according to its most common usage in the dictionary”; rather, we “must interpret the term to give proper meaning to the claim in light of the language and intrinsic evidence.””
 - Court noted that some of the processes were non-sensical for some of the display modes
 - “And while Microsoft has noted that software could be written to include all three processes in each display mode, even a process that has no sensible place in a particular mode, Microsoft did not suggest, at least in its opening brief in this court, any reason a skilled artisan would find such inclusion even arguably sensible or, therefore, a plausible reading of the claim language, especially when, so interpreted, the language would read out the only embodiment.”

Michael Kaufman v. Microsoft Corp. (Fed. Cir. 2022) (con't)



1. A method for operating a server comprising a processor for **automatically** generating an end-user interface for working with the data within a relational database defined within a relational DBMS whose data is stored in machine-readable media and which is accessible to said server, wherein said relational database comprises a plurality of tables, constraints and relationships stored in said DBMS in accordance with a data model comprising said tables and their column-complements and datatypes, said constraints, and the relationships across said tables, and wherein said relational database may be of any arbitrary size or complexity, said method comprising

(a) providing an output stream from said server, for user display and input devices, defining a user interface paradigm comprising a set of modes for interacting with a given database table, said **modes comprising create, retrieve, update and delete, and a corresponding display format for each mode;**

(b) causing said server to scan said database and apply a body of rules to determine the table structures, constraints and relationships of said data model, and store representations thereof in machine-readable media accessible to said server; and

(c) causing said server to use said representations to construct a corresponding client application for access through said user display and input devices, wherein said client application provides a connection to said database, provides displays of the table contents of said database **for each of said modes** in accordance with the display formats of said paradigm, integrates into **each said mode** display processes for representing, navigating, and managing said relationships across tables, for selecting among said modes, and for navigating across said tables and interacting in accordance the selected mode with the data in the tables that are reached by said navigation, while observing and enforcing relational interdependencies among data across said tables.

Best Medical International v. Elekta Inc (Fed. Cir. 2022)



- BMI US 6,393,096 has a 1999 priority date
 - PTAB found '096 unpatentable in two inter partes reviews, stating that a PHOSITA would have had computer programming experience. “Petitioner Elekta Inc.’s expert had that experience; Patent Owner Best Medical International Inc.’s (BMI) did not.”
 - CAFC dismissed appeal of claim 1 (lack of jurisdiction), and **affirmed** all other considered claims as obvious
- BMI claims a method of “determining an optimized radiation beam arrangement for applying radiation to a tumor target,” and requires “using a computer to computationally obtain a proposed radiation beam arrangement,” and “change the proposed radiation beam arrangement iteratively.”
 - The invention therefore includes both radiation treatment for tumors, and also computer programming to implement algorithms

Best Medical International v. Elekta Inc (Fed. Cir. 2022) (con't)



Experts need to at least be PHOSTIAs

- CAFC “BMI’s expert, Mr. Daniel Chase, does not have the requisite computer programming experience. The Board therefore considered but discounted Mr. Chase’s testimony in its obviousness analysis.”
- CAFC “We have previously identified a non-exhaustive list of factors that may guide the fact finder in finding the appropriate level of skill in the art... factors include:
 - ‘(1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field.’ Daiichi Sankyo Co. v. Apotex, Inc., 501 F.3d 1254, 1256 (Fed. Cir. 2007) (quoting Env’t Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 696 (Fed. Cir. 1983)).”
- Was computer programming experience required for a PHOSITA?
 - Elekta expert opined – PHOSITA would need to have 2+ years of experience in computer programming to understand and implement the inventions; all named inventors had such experience.
 - BMI expert did not have strong arguments for why a PHOSITA would not need programming experience
 - CAFC “Board relied on ‘the entire trial record,’ including the patent’s teachings as a whole, to conclude that formal computer programming experience was required.”
- CAFC affirmed PTAB decision, “because substantial evidence supports the Board’s finding as to level of skill in the art, as well as each of the other Graham factors, and because we discern no error in the Board’s claim”

Best Medical International v. Elekta Inc (Fed. Cir. 2022) (con't)



“a computer” and “the computer”
can be a set of computers

- Additional claim construction arguments
- Claims are interpreted in light of plain language and the written description
 - “the computer” in claim 1 does not have to be the same computer as described in claim 7
 - “We are not convinced by BMI’s argument that the claims require that the recited “computer” in the “entering” step must be the same “computer” in the “using” step and that the prior art fails to disclose this requirement. Based on the **plain claim language and written description**, we see no error in the Board’s determination that **the claims broadly allow for a set of computers** to perform these steps.

1. A method of determining an optimized radiation beam arrangement for applying radiation to a tumor target volume while minimizing radiation of a structure volume in a patient, comprising the steps of:

- using a **computer** to computationally obtain a proposed **radiation beam arrangement**;
- using a **computer** to computationally change the proposed **radiation beam arrangement** iteratively, incorporating a cost function at each iteration to approach correspondence of a CDVH associated with the proposed radiation beam arrangement to a CDVH associated with a predetermined desired dose prescription;
- comparing the dose distribution to a prescribed dose for the tumor volume and surrounding tissue structures, and increasing or decreasing radiation beam intensity if the change of the proposed beam arrangement leads to a greater correspondence to the desired dose prescription to obtain an optimized radiation beam arrangement.

...

7. The method of claim 1, wherein the CDVH associated with the predetermined desired dose prescription is computationally constructed by **the computer** based on partial volume data associated with the predetermined desired dose prescription entered into **the computer**.

Best Medical International v. Elekta Inc (Fed. Cir. 2022) (con't)



claims are not limited to a preferred embodiment

- Additional claim construction arguments (con't)
- Claims are not defined by preferred embodiments
 - “conformality control factors” do not have to be “mathematically defined parameters”
 - “We are not persuaded, because nothing in the plain language limits the claims to “mathematically defined parameters.” While BMI cites to a passage from the written description describing a specific embodiment that supports its proposed construction, see '096 patent col. 14 ll. 42–52, **we do not “limit[] claims to a preferred embodiment.”**

43. A method of determining an optimized radiation beam arrangement for applying radiation to at least one tumor target volume while minimizing radiation to at least one structure volume in a patient, comprising the steps of:
distinguishing each of the at least one tumor target volume and each of the at least one structure volume by target or structure type;
determining desired partial volume data for each of the at least one target volume and structure volume associated with a desired dose prescription;
entering the desired partial volume data into a computer;
providing a user with a range of values to indicate the importance of objects to be irradiated;
providing the user with a range of **conformality control factors**; and
using the computer to computationally calculate an optimized radiation beam arrangement.

Finjan LLC v. ESET LLC (Fed. Cir. 2022)



- Finjan, Inc. (“Finjan”) filed suit against ESET, LLC (“ESET”) in the Southern District of California, asserting that ESET infringed U.S. Patent Nos. 6,154,844; 6,804,780; 8,079,086; and 9,189,621
- The asserted patents are part of a family of patents directed to systems and methods for detecting computer viruses in a “Downloadable”
 - District court found the asserted patents indefinite based on the word “small” as used in the court’s construction of a “Downloadable”
 - CAFC reversed the district court’s claim construction, vacated the decision of indefiniteness and remanded for further proceedings based on the new claim construction

<https://law.justia.com/cases/federal/appellate-courts/cafc/21-2093/21-2093-2022-11-01.html>

Finjan LLC v. ESET LLC (Fed. Cir. 2022) (con't)



incorporation by reference of A into B does not convert invention A into invention B

- The term a “Downloadable” appears in the claims of all of the asserted patents, but is defined differently in the different patents.
 - ‘639 patent first defines a “Downloadable” as “an executable application program which is automatically downloaded from a source computer and run on the destination computer. Examples of Downloadables include applets designed for use in the Java™ distributing environment...”
 - Non-asserted U.S. Patent Nos. 6,167,520 (“the ‘520 Patent”) and 6,480,962 (“the ‘962 Patent”) define Downloadables as “applets” and as “a small executable or interpretable application program which is downloaded from a source computer and run on a destination computer.”
 - Two of the asserted patents, the ‘844 and ‘780 patents (that both incorporate the ‘520 patent by reference), define a Downloadable as “an executable application program, which is downloaded from a source computer and run on the destination computer.”
 - The three remaining asserted patents, the ‘086, ‘621, and ‘755 patents, do not include a definition of “Downloadable” but incorporate the ‘962 and ‘780 patents by reference.
- The district court construed the term a “Downloadable” to mean “a small executable or interpretable application program which is downloaded from a source computer and run on a destination computer.”
- A claim is invalid for indefiniteness under 35 U.S.C. § 112 if its language, when **read in light of the specification** and prosecution history, fails to inform skilled artisans about the scope of the invention with reasonable certainty...
 - That includes any patents incorporated by reference. Patents that are incorporated by reference are “effectively part of the host [patents] as if [they] were explicitly contained therein.”
 - Yet, “incorporation by reference does not convert the invention of the incorporated patent into the invention of the host patent.”
 - “The disclosures of related patents may inform the construction of claim terms common across patents, but it is erroneous to assume that the scope of the invention is the same such that disclaimers of scope necessarily apply across patents...”

<https://law.justia.com/cases/federal/appellate-courts/cafc/21-2093/21-2093-2022-11-01.html>

Finjan LLC v. ESET LLC (Fed. Cir. 2022) (con't)



Different definitions can exist in harmony within a patent family

- “The district court erred because it viewed the differing definitions throughout the patent family as competing and... should be limited to the most restricted definition of the term. We disagree. The use of a restrictive term in an earlier application does not reinstate that term in a later patent that purposely deletes the term, even if the earlier patent is incorporated by reference...
 - The '520 Patent, which defines a Downloadable as “small,” represents a subset of the patent family claiming... small executable or interpretable application programs. That is because the disclosure in the '520 Patent focuses on applets as small executable or interpretable application programs...
 - The definition of “Downloadable” that does not include a size requirement refers to executable or interpretable application programs of all sizes, including, but not limited to, “small” executable or interpretable application programs. Because these two definitions can exist in harmony within the patent family, we do not necessarily have to apply the '520 Patent’s definition to the asserted patents...
 - The '844 and '780 Patents define Downloadable to contemplate a broader functionality of the claimed invention not limited to downloading only “small” executable application programs, and the examples in the '844 and '780 Patents provide further support. Hence, in the '844 and '780 Patents, “Downloadable” should not be construed to include the term “small.”..
 - As noted, the '086, '621, and '755 Patents do not expressly define Downloadable but incorporate patents by reference that include both the '520 Patent’s restricted definition of Downloadable with the word “small” and the broader definition without it. Similar to the '844 and '780 Patents, the '086, '621, and '755 Patents include examples expanding upon the '520 Patent’s focus on “small” executable or interpretable application programs like applets as well...
- Because we reverse the district court’s claim construction, we need not to review the entirety of the district court’s determination of invalidity due to indefiniteness.”

<https://law.justia.com/cases/federal/appellate-courts/cafc/21-2093/21-2093-2022-11-01.html>



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Thank You