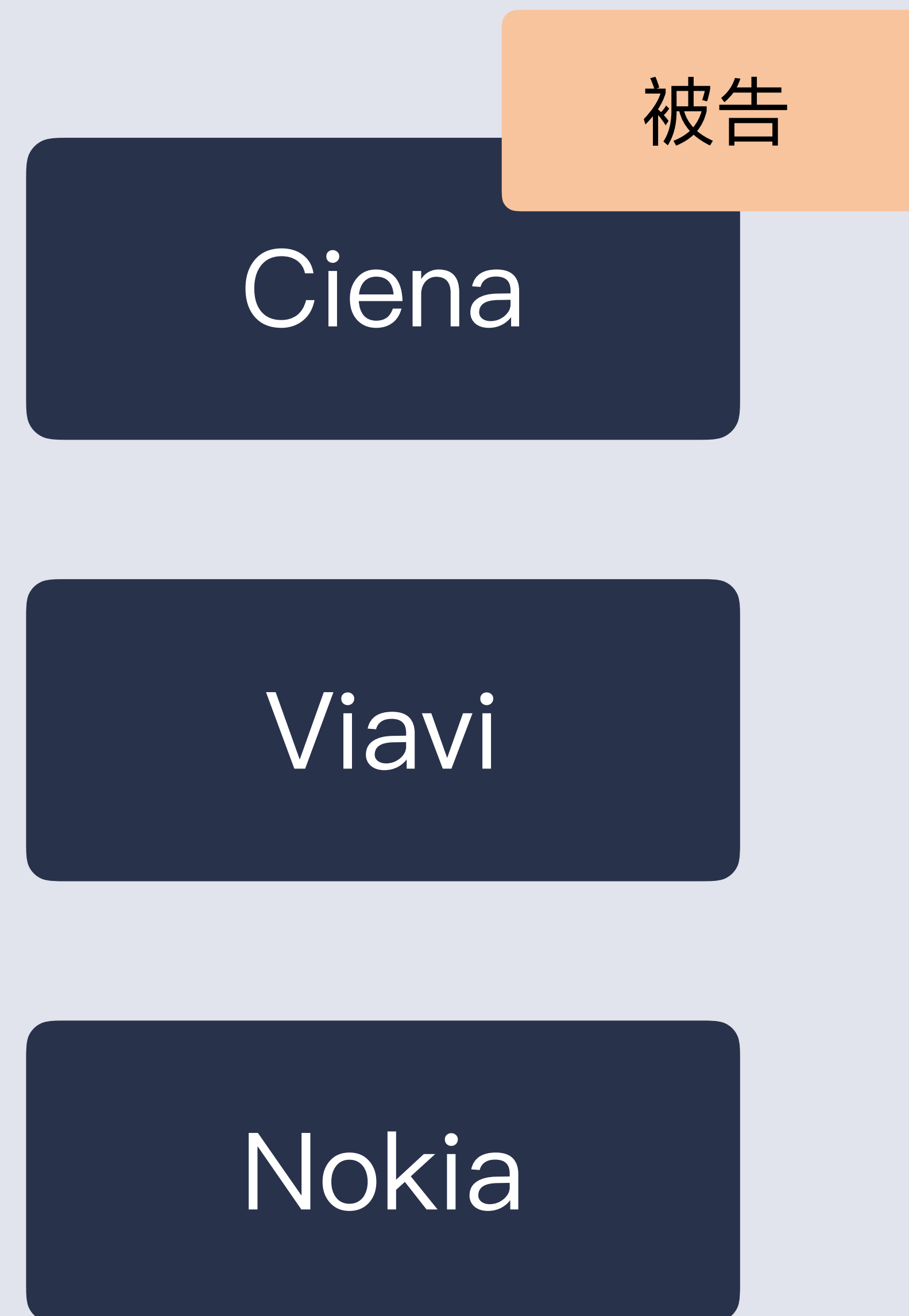
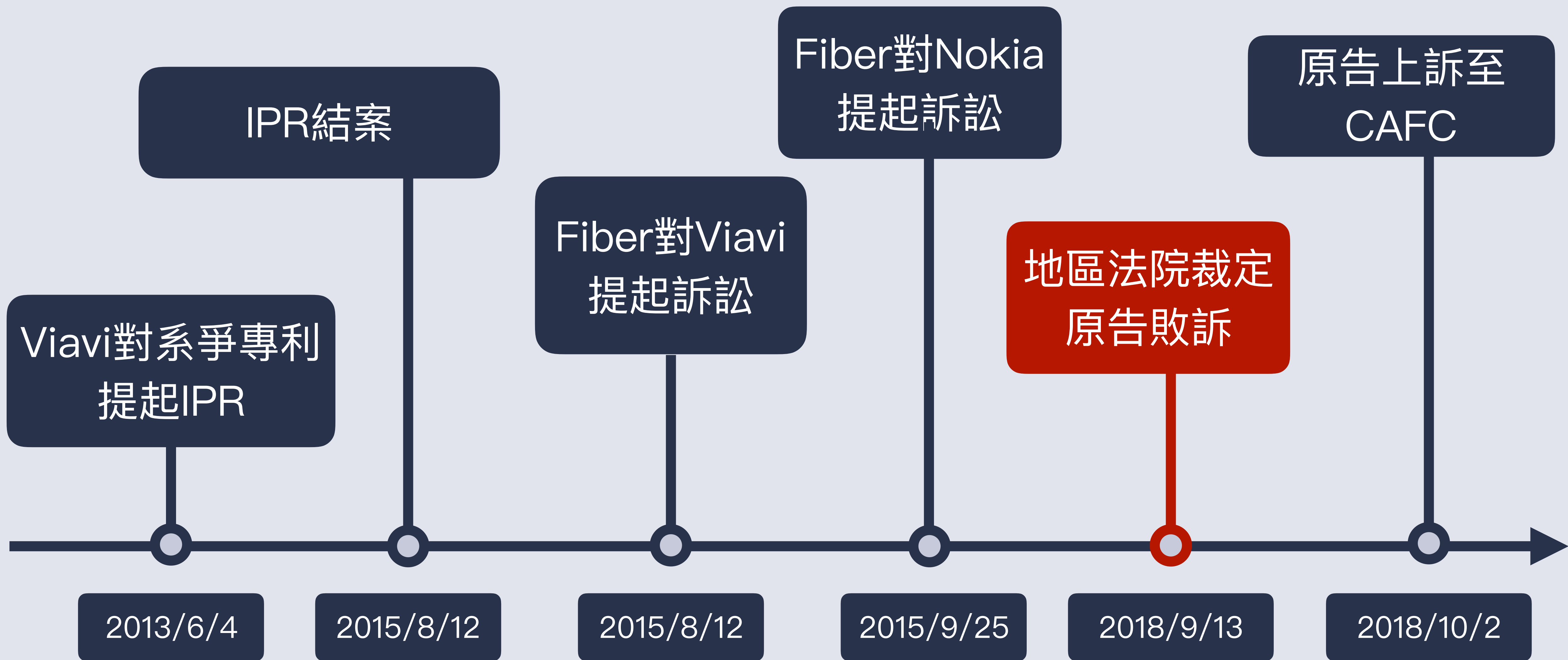


Fiber, LLC v. Ciena Corporation, 2019 WL 6216149

專利碩一 陳宇震

Background





判決結果

We have considered **Fiber**'s remaining arguments and find them unpersuasive. We **affirm** the district court's final judgment that all of the asserted claims of the '917 patent are **invalid as indefinite**.

Relevant Patent

US7095917

Optical switching apparatus

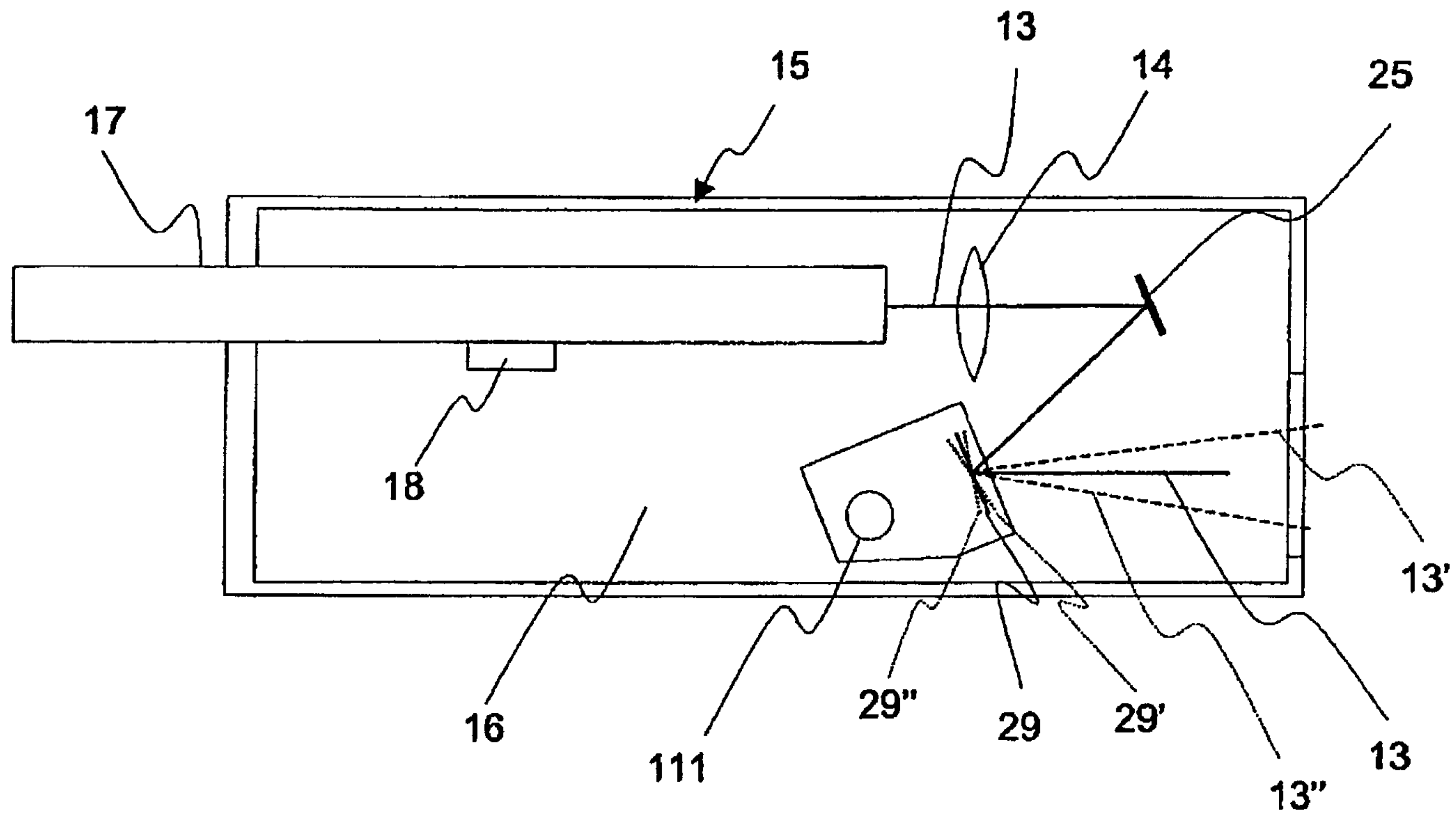


Fig. 2

Relevant Claim

27. An optical beam switching system for transmitting an optical beam from at least one source to at least one of a plurality of optical receptors comprising:

...

a **control** operative for at least one of 1) **positioning** a first beam directing device to direct the optical beam from at least one source to at least one additional beam directing device, 2) positioning at least one additional beam directing device to direct the optical beam from said additional beam directing device to a second beam directing device, and 3) positioning a second beam directing device to direct the optical beam from said second beam directing device to a selected one of said plurality of optical receptors; and

at least one **data gathering and transmission element** to provide an indication regarding the current orientation of the controlled beam directing device or the current location of the optical beam to the control for adjusting at least one of the beam directing devices.

Relevant Claim

53. An optical beam switching system for transmitting an optical beam from at least one source to at least one of a plurality of optical receptors comprising:

...

a **control** so that a first beam directing device will be positioned to direct the optical beam from at least one source to a selected one of said plurality of optical receptors; and

at least one **data gathering and transmission element** to provide an indication regarding the current orientation of the controlled beam directing device or the current location of the optical beam to the control for adjusting at least one of the beam directing devices.

Points issued at appeal

Is claim 27 and 53 a means plus function limitation?

Is claim 27 and 53 invalid as indefinite?

Relevant Claim

27. An optical beam switching system for transmitting an optical beam from at least one source to at least one of a plurality of optical receptors comprising:

...

a **control** operative for at least one of 1) **positioning** a first beam directing device to direct the optical beam from at least one source to at least one additional beam directing device, 2) positioning at least one additional beam directing device to direct the optical beam from said additional beam directing device to a second beam directing device, and 3) positioning a second beam directing device to direct the optical beam from said second beam directing device to a selected one of said plurality of optical receptors; and

at least one **data gathering and transmission element** to provide an indication regarding the current orientation of the controlled beam directing device or the current location of the optical beam to the control for adjusting at least one of the beam directing devices.

control

data gathering and transmission element

positioning

Relevant Laws

Means plus function – 35 USC 112(f)

(f) ELEMENT IN CLAIM FOR A COMBINATION.—An element in a claim for a combination may be expressed as a **means or step** for performing a specified function **without the recital of structure, material, or acts** in support thereof, and such claim shall **be construed to cover the corresponding structure, material, or acts** described in the specification and equivalents thereof.

Means plus function claim沒有在claim當中列舉所用之技術，
而是需參照說明書才能解讀

Specification– 35 USC 112(b)

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

使用means plus function claim時，要注意說明書需有相對應結構說明，否則會因違反此條明確性之要求而無效

MPEP 2181

3 prongs to identified MPF

(a) The claim limitation uses the term “means” or “step” or a generic placeholder (a term used as a substitute for “means”)

如果沒包含“means”、“step”或是特定通用用語，
可能就不屬於112(f)的情況，反之就可能屬於。
當該領域普通技術人員（PHOSITA）在閱讀專利說明書時
能瞭解用語而足以定義出執行某功能的結構名稱，
或為可從功能識別出其結構，**可以不以112(f)解釋專利範圍。**

3 prongs to identified MPF

(b) the term “means” or “step” or the generic placeholder is modified by functional language

如果“means” or “step”沒有連結到特定功能，
就不屬於112(f)的情況。

3 prongs to identified MPF

(c) the term “means” or “step” or the generic placeholder must not be modified by sufficient structure, material, or acts for achieving the specified function.

“means”、“step”或是特定通用用語，
無需為了要表達特定功能，有太多結構上的描述。若當中的描述可以被POSITA明確定義或是可以描述出該功能，將不屬於112(f)的情況。

112(f) and 112(b)

If the claim is means-plus-function claim (invoke 112(f)), it should disclose sufficient corresponding structure. 112(b)

當一個請求項屬於112(f)的情況時，
同時也需要符合112(b)的檢驗。

Is claim 27 and 53
means-plus-function limitation?

Appellant's arguments

No, it is not means-plus-function limitation.

Appellant's argues

The word “control” is not a means plus function term and does not invoke 112(f)

Intrinsic evidence

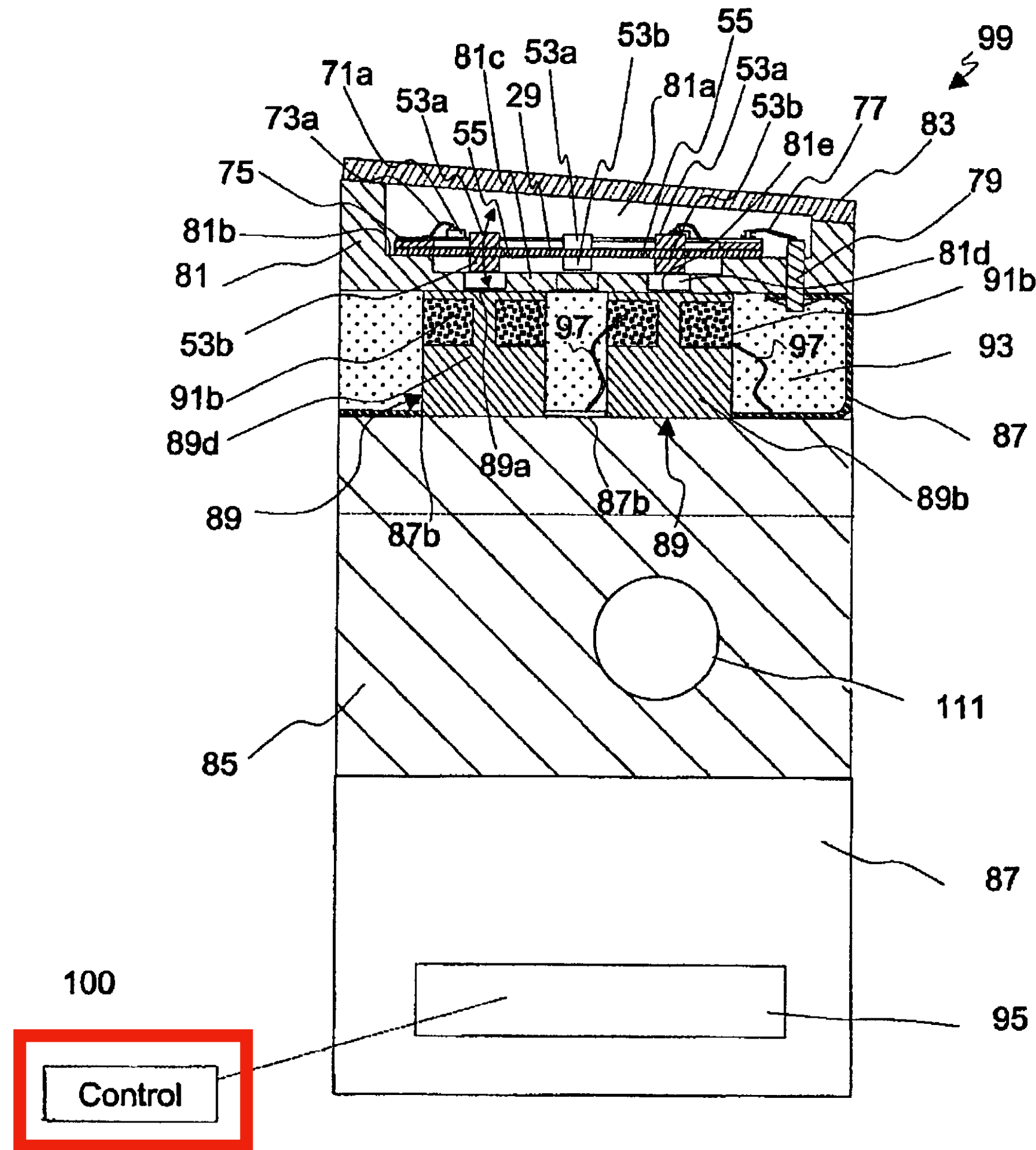


Figure 7a

POSITA would interpret “control” to refer to sufficiently definite structure based on intrinsic and extrinsic evidence.

There is more than ample structure set forth in the specification and prosecution history

Fiber argues that the “control,” depicted in Figure 7A imparts structure.

Other argument

Fiber then argues that “control” is more similar to “circuit,” which it argues inherently connotes structure, than it is to “control means,” which it acknowledges does not typically connote structure.

Fiber認為請求項中的”control”是表示”control circuit”，
不是”control means”。

CAFC's opinion

Yes, it definitely is.

Intrinsic evidence – CAFC said

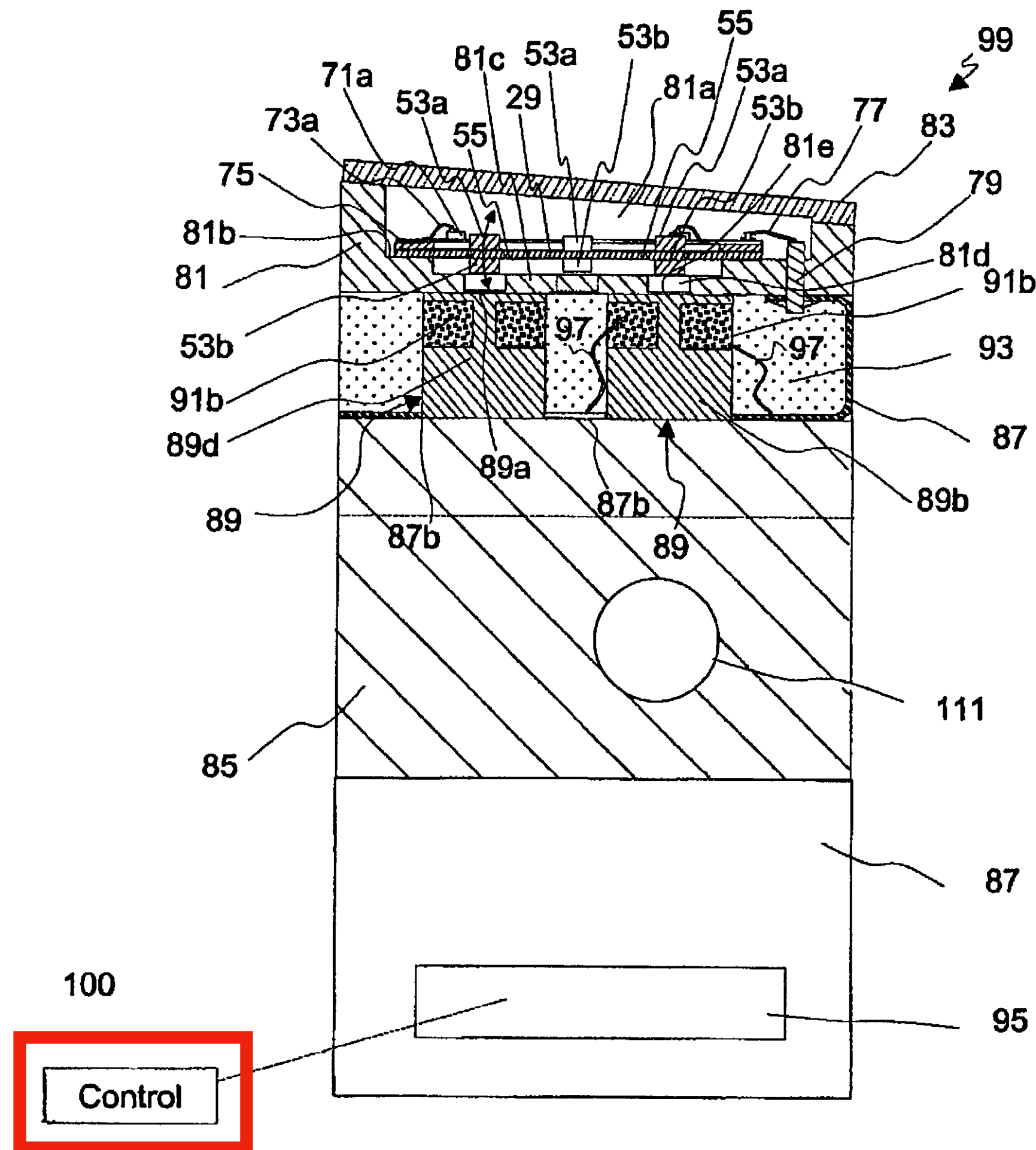


Figure 7a

Figure 7A is a cross-section of an optical switch package including mirror 29 and the optic units sensing control system 100. But, as shown above, the “control” depicted in Figure 7A is a generic box **with no indication of any structure.**

Is claim 27 and 53
invalid as indefinite?

Appellant's arguments

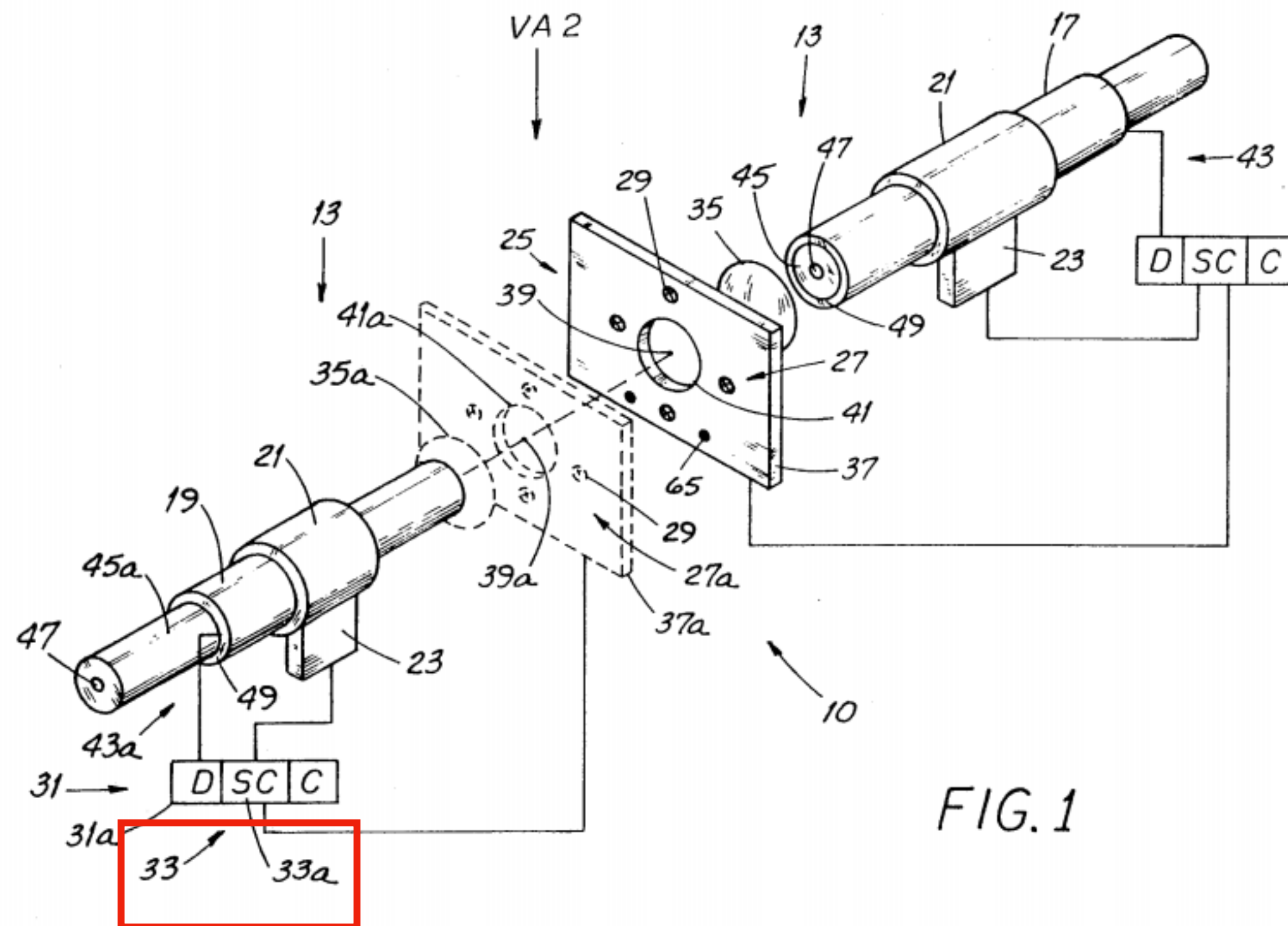
No, it is not invalid as indefinite.

Appellant's arguments

Even if “control” is a means-plus-function term, it is not indefinite because the specification discloses sufficient corresponding structure.

Fiber認為請求項中的“control”就算是手段功能用語術語，
該請求項也不會因為揭露不夠明確而無效。

Reference



Fiber identified a portion of the specification that incorporates another patent, US5177348, by reference.

CAFC's opinion

Yes, it definitely is.

Reference – CAFC said

The reference to the '348 patent in the cited portion of the specification discusses data gathered related to mirror positioning which is then sent to the control. It does not indicate structures of the control.

CAFC認為Fiber引用來幫助說明的專利是在說明資料收集，
跟解釋“control”根本無關。

Remaining point

Remaining point

Because we agree that the district court correctly construed “control” and found it invalid as indefinite, we do not reach the district court’s construction of the terms “data gathering and transmission element” and “positioning.”

第一個爭點就抓到因揭露不足而無效，
所以後面也不用看了，提早下班。

Conclusion

“control” is a means plus function word.

specification disclose **insufficient** corresponding structure

Claim 27 and 53 is invalid as indefinite

“control” is a means plus function word.

specificat

Plaintiff Lose

structure

Claim 27 and 53 is invalid as indefinite

My opinion

Amend claim

a **control circuit configured to** operative at least one of 1) positioning a first beam directing device to direct the optical beam from at least one source to at least one additional beam directing device, 2) positioning at least one additional beam directing device to direct the optical beam from said additional beam directing device to a second beam directing device, and 3) positioning a second beam directing device to direct the optical beam from said second beam directing device to a selected one of said plurality of optical receptors; and