

No. 05-1301

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***United States Court of Appeals***

For the Federal Circuit

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NATIONAL INSTRUMENTS CORPORATION,

*Plaintiff-Appellant,*

v.

THE MATHWORKS, INC.,

*Defendant-Appellee.*

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**Appeal From The United States District Court  
For The Eastern District Of Texas In No. 2:01-CV-00011  
T. John Ward, United States District Judge**

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**BRIEF OF DEFENDANT-APPELLEE THE MATHWORKS, INC.**

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## CERTIFICATE OF INTEREST

Counsel for The MathWorks, Inc. hereby certifies the following:

1. The full name of every party represented by me is:

The MathWorks, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not applicable.

3. All parent corporations and any publicly held companies that own 10 percent of more of the stock of the party or amicus curiae represented by me are:

None.

4. The name of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are appearing in this Court are:

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## **STATEMENT OF RELATED CASES**

Other than the present appeal, the only other appeal in or from the same civil action or proceeding in the lower court was *National Instruments Corp. v. The MathWorks, Inc.*, Federal Circuit Nos. 03-1540, -1553, decided September 3, 2004, by then-Chief Judge Mayer, Senior Judge Friedman, and Judge Linn, with the unpublished opinion located at 113 Fed. Appx. 895, 2004 WL 2030128.

One declaratory-judgment case, pending in the United States District Court for the Eastern District of Texas, involves the same parties and the same four patents-in-suit as in this case. This related case is *The MathWorks, Inc. v. National Instruments Corp.*, No. 2:04-cv-00333-TJW (E.D. Tex.), filed September 22, 2004, and it has been stayed pending the present appeal.



## **COUNTERSTATEMENT OF ISSUES**

1. Did the district court abuse its discretion by denying National's contempt motion, where MathWorks' redesigned products re-implemented a pause behavior that the district court found was neither adjudicated in the earlier infringement trial nor covered by the injunction, where National previously admitted that this pause behavior avoided infringement, and where the new "res judicata" theory National now seeks to advance on appeal was not the premise of its contempt motion in the district court and is, in any event, unmeritorious?

2. Do judicial and equitable estoppel present alternative bases for affirming the district court's denial of National's contempt application, where National consistently maintained in the prior proceedings that all of the claims-in-suit require "liveness," leading MathWorks to redesign its products to be non-"live"?

## **PRELIMINARY STATEMENT**

After MathWorks was held liable for infringement in a 2003 trial and subjected to an injunction barring further infringement, MathWorks redesigned its Simulink products to remove a "liveness" feature from the adjudicated products (*i.e.*, MathWorks introduced a "pausing" behavior into the products). A pre-1996 version of the Simulink product contained a similar "pausing" behavior, and National earlier in this case (i) contended that the absence of "liveness" in this

earlier version avoided infringement, and (ii) admitted that this earlier version was not among the products adjudicated in the 2003 trial. National relied to its significant benefit on this “liveness” requirement to avoid MathWorks’ laches and estoppel defenses, to avoid invalidity by prior art, and to argue for higher damages. In denying National’s motion to find MathWorks in contempt, the district judge agreed that pre-1996 versions of MathWorks’ products had not been adjudicated in the 2003 trial, and were not included within the injunction that he himself drafted and signed.

National now claims that the pre-1996 products *were* adjudicated in the 2003 trial, and further claims that the addition of the “pausing” behavior is such a minimal change that a proceeding for contempt of the injunction order is appropriate. But National cannot, on appeal, overcome the district judge’s contrary findings and conclusions by simply denying them, and changing course with respect to its own prior statements—particularly not under the deferential abuse-of-discretion standard that applies here: The district court’s denial of National’s motion was based on proper factual findings and legal conclusions, and in no event amounted to an abuse of the broad equitable discretion conferred upon district courts charged with evaluating contempt motions. Deference is particularly appropriate here, where the district judge evaluating National’s motion was the same district judge who heard and decided all of the pre- and post-trial motions,

presided over the trial, charged the jury, and crafted the very injunction that National accused MathWorks of flouting. The judgment should be affirmed.

### **COUNTERSTATEMENT OF THE CASE**

MathWorks regrets having to burden the Court with counterstatements of the issues, case, and facts. However, in view of the liberties taken by National in its brief, MathWorks believes that these counterstatements are important to this Court's review.

**The Injunction Action.** This appeal comes to this Court from the district court's denial of National's motion to hold MathWorks in civil contempt of the injunction entered in this patent-infringement case. National filed this action against MathWorks on January 25, 2001, alleging infringement of four related patents owned by National—U.S. Letters Patent Nos. 5,301,336 (“the ‘336 patent”), 4,901,221 (“the ‘221 patent”), 4,914,568 (“the ‘568 patent”), and 5,291,587 (“the ‘587 patent”). (A87–92) After a ten-day trial, the jury found infringement of all asserted claims of the ‘336, ‘221, and ‘568 patents, noninfringement of the ‘587 patent, and awarded National \$3.5 million in damages. (A22–30)

After considering the parties' post-trial motions, the district court entered final judgment on June 23, 2003, holding MathWorks liable for infringement of three of the four patents-in-suit, and entered a permanent injunction precluding the

manufacture and sale of “Simulink, either alone or in combination with any other product and all other products that are only colorably different therefrom in the context of the Infringed Claims.” (A2) The court then immediately stayed its injunction pending the outcome of the parties’ appeal, in view of the court’s finding that MathWorks had “made out a substantial case on the merits.” (A41)

**Appeal of the Infringement Verdicts and Injunction.** MathWorks appealed the infringement and validity verdicts and the scope of the injunction, and National cross-appealed the jury’s noninfringement verdicts on the claims of the ‘587 patent. (A28360–637) This Court affirmed the district court’s judgment. (A27922–31) Thereafter, the district court lifted its stay of the injunction. (A27074)

**MathWorks’ Redesign and Declaratory-Judgment Suit.** In compliance with the district court’s injunction, MathWorks ceased the sale and manufacture of the products found to infringe, and redesigned the Simulink software to avoid infringement, releasing, in September 2004, Simulink version 6.1 (as part of Release 14)—but only after obtaining an extensive noninfringement opinion from outside non-litigation patent counsel. (A27567–612)

Relying on positions taken by National during the infringement proceedings, MathWorks’ new release of Simulink in version 6.1 removed “live” inputs, or, put another way, MathWorks introduced a “pausing” behavior to a particular class of

blocks—source blocks—that National identified as meeting the key claim limitations of “input variable-icon” and “input control,” one or the other of which is present in all claims at issue. (A27614–15, A27617–21; *see also* A27213–15, A27233–34) More specifically, when a user clicks on a source block to provide inputs in Simulink, any output displayed to the user freezes or pauses, and thus there are no longer “live” inputs.”<sup>1</sup> (*Id.*) This change was significant because removing “live” inputs from Simulink reintroduced to the software a behavior in an earlier version (version 1.3) that National repeatedly said did not infringe precisely *because* it did not have “live” inputs: National argued that this earlier version of Simulink did not infringe in order to avoid MathWorks’ defenses of

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<sup>1</sup> At the infringement trial, National’s lead counsel defined “live” inputs during cross-examination of Dr. Sutherland, one of the prior-art witnesses:

[Mr. McKool, National’s counsel]: Okay. What I mean by *live input* is a situation where these input values here on the left-hand side, any of these, could be changed while the program continued to run, *not froze, but continued to run even to the point that you saw it changing output*. And as you entered a new input, for example, click on this knob at 85 and turned it up to 90, that *while the program continued to run and the output continued to be shown in a dynamic fashion, that it would change the input and the effect on the output would be shown*.

(A27547 (emphasis added))

laches and estoppel, and to argue for higher damages for infringement by “live” products; National also relied on “live” inputs and the pause behavior to avoid invalidity by prior art. (A27134, A27160–61, A27164–65, A27488–90, A27493–94, A27497–98, A27513–15, A27526–27, A27531–33, A27537–39, A27547, A27830, A28657)

When it released the modified products, MathWorks also filed an action in the district court, seeking a declaratory judgment that Simulink version 6.1 did not infringe. *MathWorks, Inc. v. Nat’l Instruments Corp.*, No. 2:04-CV-00333-TJW (E.D. Tex. filed Sept. 23, 2004). That separate case, in which National has asserted infringement counterclaims, has been stayed on National’s agreed motion in favor of this appeal.

**National’s Contempt Motion.** On November 3, 2004, National filed a contempt motion against MathWorks, alleging that Simulink version 6.1 violates the injunction and infringes the claims covered by the injunction. (A27202–435) National nowhere in its briefs argued that the modified product was the same as the Simulink versions already adjudicated, as it now argues to this Court. Rather, National argued that version 6.1, and certain new features of that version, are “not more than a colorable change” from the products adjudicated. (A27203, A27205, A27213, A27227)

On January 5, 2005, the district court held a hearing, and denied National's motion. (A27822–921) The court observed that the infringement trial did not concern version 1.3, but only later, post-1996 versions of Simulink:

[W]hen I look back at the injunction, I didn't use what – I used Simulink, I didn't say which version, but I know what I submitted to the jury. And if you're suggesting that I made some implied finding, by using the general term Simulink, I'm just telling you, I didn't.

\* \* \*

We stipulated – as far as that stipulation said you weren't – you know, that y'all made a trade out there.<sup>2</sup> So I knew when I was trying this case, sitting up here, that I was trying the case of post-1996 versions, the later versions. It never crossed my mind that we were trying anything else, and, you know, I'm just telling you that you are asking me to do something that would be violative of my own – what I think I tried in this case. And I may be wrong, but I'm telling you that this Court, for the record, never considered that we were trying anything other than the later versions of the product. . . . Because I never intended to, nor did I make any implied finding of anything with respect to 1996 – prior to 1996.

(A27916–17) After hearing lengthy argument, the district court concluded that “the evidence is not sufficient for me to find from a clear and convincing standard that there is infringement” by the redesigned products. (A27920)

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<sup>2</sup> In the “trade” referenced by the district court, National withdrew its claim for damages relating to allegedly infringing sales made prior to January 24, 2001 (the date on which the infringement action was filed), which MathWorks agreed mooted its laches defense. (A28638, A26840) The parties then memorialized that agreement by stipulation. (A1877–78)

In its January 31, 2005 order, the district court concluded that “the defendant’s new version of its Simulink product is more than colorably different from the product found to infringe at trial” (A1 (citing *KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522 (Fed. Cir. 1985))), and, therefore, that “[s]ubstantial issues [about MathWorks’ redesigned products] remain to be litigated” (*id.*). Accordingly, the court held that “contempt proceedings are not appropriate,” and it denied National’s motion. (*Id.*)

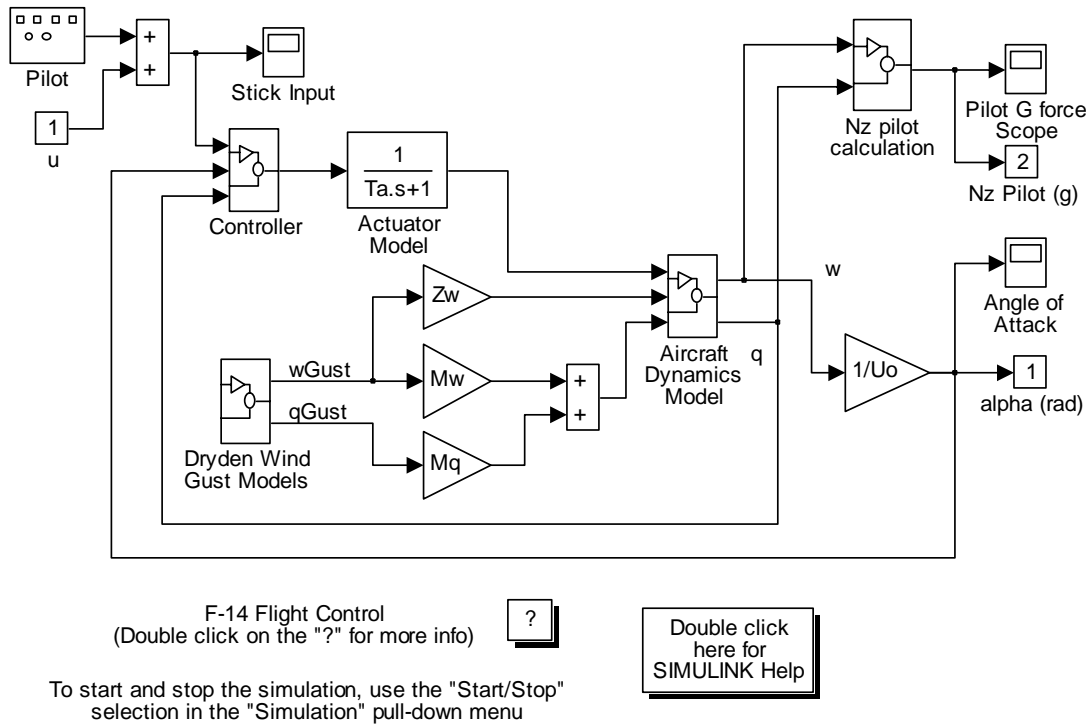
National now seeks appellate review of the district court’s order denying the contempt motion.

## **COUNTERSTATEMENT OF FACTS**

### **A. MathWorks’ Simulink Product, In General**

“Simulink” is the name shared by various versions of a software product designed and marketed by MathWorks, which MathWorks first released in 1990. Simulink allows users to build computer simulations (models) of complex systems, like fighter jets and automotive engines, so that the user can efficiently design and evaluate such systems before building them in the real world. These simulations are represented in the computer by block diagrams that the user builds by selecting various blocks—including source blocks (“input” blocks), sink blocks (“output” blocks), and function blocks (computational blocks)—and interconnecting the blocks using signal lines, as exemplified in the following F-14 fighter-jet model:



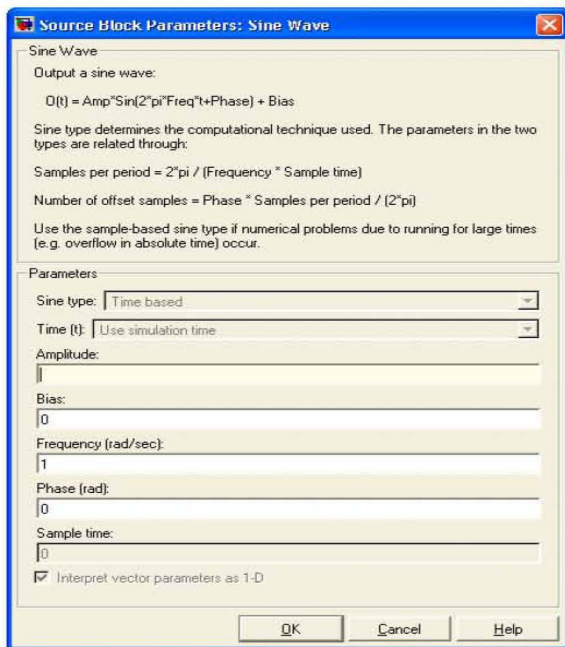


Once the block diagram is built, the user can test the simulation by running it and, among other things, has the option of changing the parameters (values) of source blocks—the blocks that provide inputs to the system for processing—to study the effects of parameter variation. (A27615–16)

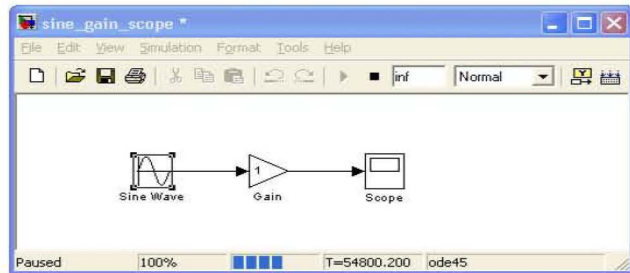
**B. MathWorks’ Redesign Re-Implements The Pre-1996 “Pause” Behavior**

After National obtained jury verdicts and an injunction in its favor in the earlier infringement trial, MathWorks modified Simulink, designing version 6.1 to not permit “live” inputs. To be precise, MathWorks modified the source blocks in version 6.1 to return to the non-“live” behavior of the pre-1996 versions that National explicitly identified as not infringing for just that reason. (A27614–15, A27617–21) Thus, when a user in Simulink version 6.1 opens a dialog box to

change a source-block parameter, Simulink “pauses,” and the user cannot simultaneously observe changes in simulation outputs. (*Id.*) National has never disputed that version 6.1 replicates the pause behavior it pointed to in the pre-1996 versions as noninfringing. (A27205–06; NIB 36–37) The following figure demonstrates a very simplified example of the pause behavior in Simulink version 6.1:



During simulation, a double-click on the Sine Wave block icon will open the dialog box and cause Simulink to pause



MathWorks re-implemented the pause behavior in direct reliance on National’s word that all of the claims-in-suit require “live” inputs, that infringement began with the introduction of “liveness” into Simulink version 2.0 in 1996, and that version 1.3 and other non-“live” pre-1996 versions do not infringe. (A27160–61, A27531–33, A27488–90, A27547, A28657) Nevertheless, to ensure noninfringement and compliance with the district court’s injunction, MathWorks,

prior to releasing Simulink version 6.1, obtained advice from outside non-litigation patent counsel on whether version 6.1 and its new features (namely, the external-time option and Model Explorer) would avoid infringement, in view of the pause behavior. Only after obtaining outside counsel's opinions, presented in a detailed and considered letter in which he concluded that version 6.1 and its new features do not violate the injunction and do not infringe any of the claims included in the injunction, did MathWorks release the new version. (A27567–612)

**C. Before And During The 2003 Infringement Trial, National Asserted That “Liveness” Was A Requirement For Infringing All Claims-In-Suit Of Its Patents**

National consistently maintained throughout the prior proceedings that *all* of the claims require “live” inputs—a position that was neither isolated, nor uncertain, nor limited to some subset of claims. National relied on this “liveness” requirement to argue, in opposition to MathWorks’ motion for summary judgment on laches and estoppel, that it was not too late in filing suit against MathWorks. More specifically, National maintained that because pre-1996 versions such as version 1.3 do not permit “live” inputs, they do not infringe and therefore National had not unreasonably delayed in bringing suit in 2001. Not surprisingly, then, pre-1996 versions were not tried for infringement. Instead, National’s infringement action was directed against versions 4.1 and 5.0—*post*-1996, “live” versions of MathWorks’ Simulink product. (A27214, A27218) National also relied on the

“liveness” behavior to distinguish prior art and avoid invalidity, and to argue for higher damages against MathWorks.

National’s brief, however, fails to acknowledge these points. Indeed, National claims falsely—there is no other word for it—that pre-1996, non-“live” versions of MathWorks’ Simulink product were adjudicated in the 2003 trial. Remarkably, National makes this claim in the face of the words of its own contempt motion, where National expressly noted that the “*adjudicated products*” *did not contain the “pause” behavior that is identified with pre-1996 version 1.3.* In its contempt motion, National stated:

The only operational difference between the modified products and the adjudicated products is that in the modified products, [there is the “pausing” behavior], whereas *no such pause occurred in the adjudicated products.*”

(A27218 (emphasis added)) National also acknowledged in its contempt motion that the “adjudicated products” were Simulink versions 4.1 and 5.0 (included in Releases 12.1 and 13, respectively), with no mention of any other version, let alone version 1.3 or any other pre-1996 version of Simulink. (A27214)

### **1. National’s Consistent Representations On “Liveness” At Trial**

National’s closing argument to the jury highlights its unambiguous position that all claims require “liveness,” pointing to the “liveness” requirement in order to distinguish the prior art. Indeed, the district court, at the hearing on National’s

contempt motion, explicitly recalled National’s use of the “liveness” requirement for just this purpose. (A27830) Thus, with respect to the Sutherland and the Prograph prior art, National’s counsel argued in closing at the infringement trial:

We know it has no graphical input control. Dr. Sutherland told us, you can’t manipulate the input icons. *We know there’s no live inputs.* Remember, [Sutherland] pauses whenever you want to input anything, the program pauses. . . . It *freezes* whenever you want to input. There’s *no live inputs*. There’s no anticipation. . . .

Again, there’s no input control at all in Prograph. *We know that the program pauses when you insert a value, so that there’s no live input.* And again, the input isn’t visible. It’s not graphical. That’s not a front panel.

(A27488 (emphasis added))

In its final opportunity to argue to the jury—rebuttal closing argument—National further reiterated the importance of “liveness” to the validity of the claims-in-suit and to the invention generally:

[MathWorks’ counsel] tells us that Sutherland didn’t pause. Well, I was standing right here, and I looked at Mr. Sutherland, and I said, does it pause? He said, yes, it freezes . . . . *It freezes when you put an input in. That’s not a graphical user interface.*

A graphical user interface, as we’ve heard, and I don’t think there’s any dispute about this, requires the user to be able to interact with the screen. *Live inputs, we’ve heard are important, to this invention. That is not a live input.*

(A27489–90 (emphasis added)) There is no suggestion that these statements apply to only some of the claims-in-suit, as National now asserts.<sup>3</sup>

## **2. National’s Formulation Of The Requirement Of “Liveness” And The Position That Pre-1996 Versions Do Not Infringe**

National formulated and asserted its “liveness”-is-required position long before trial—as evident in its summary-judgment briefing, in the reports and deposition testimony of National’s experts, and in National’s (rejected) offer to compromise on its position that all claims require “liveness.” And, consistent with that position, National repeatedly recognized that pre-1996 versions do not infringe because they are not “live.”

**National’s Response To MathWorks’ Summary-Judgment Motion of Laches and Equitable Estoppel.** Laches and equitable estoppel had the potential to be a significant issue in this case: National’s 2001 infringement suit sought to

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<sup>3</sup> In a misguided attempt to rebut the clear statements of National’s position on “liveness” during its closing argument, National suggests that its closing argument merely presented assertions made “generally,” rather than with regard to the “input variable-icon” and “input control” claim limitations. (NIB 55) That suggestion is belied by the fact that, when National, in its closing argument, repeatedly emphasized “liveness,” it did not limit that requirement to only *some* of the claims. Indeed, by defending against MathWorks’ invalidity case with such “general” arguments, rather than claim-by-claim, National only underscored the fact that this “liveness” requirement applied to all claims-in-suit, across the board. *See, e.g., Ortho Pharm. Corp. v. Smith*, 959 F.2d 936, 942 (Fed. Cir. 1992); 35 U.S.C. § 253 (2005).

accuse Simulink, a product that MathWorks had successfully marketed for *eleven years*. MathWorks, after the district court construed the patent claims, filed a motion for summary judgment of laches and equitable estoppel, asserting that National’s eleven-year delay in bringing suit was unreasonable and had worked to MathWorks’ prejudice. (A27078–112) In opposing that motion, National ultimately asserted—indeed, it had to assert—that *all* of the claims require “live” inputs and that, because pre-1996 versions of Simulink did not permit “live” inputs, National had not unreasonably delayed filing suit. (A27160–61)

To be sure, National’s initial briefing on this motion was somewhat equivocal, asserting in its initial response that “all or at least several of the claims [of the patents-in-suit] require such ‘live’ inputs.” (A27124) Of course, if only “several” but not “all” of the claims-in-suit required “live” inputs, then National could not possibly have relied on “live” inputs being introduced in 1996 (version 2.0) as an excuse for delaying suit until 2001. Thus, MathWorks argued that National could have, and should have, asserted infringement much sooner, at least as to those claims that National believed did not require “live” inputs. (A27145–47)

National, in its summary-judgment surreply, thus had to—and did—make its position crystal-clear and unqualified, stating, *in its own words*, that “National Instruments’ position in this case” was “that infringement requires this ‘live’

feature.” (A27161) Indeed, National expressly distinguished “National Instruments’ position” from that of one of its experts, Dr. Rhyne, who “opined that infringement of some of the asserted claims does not require ‘live’ inputs.” (*Id.*)

Full quotes from National’s summary-judgment surreply make the point clearly:

National Instruments’ raising the patent issue [in 1999 and thereafter filing suit in 2001] was reasonable because: (1) the Dials & Gauges Blockset [first released in 1998] provided input and output controls for Simulink that had the same “look and feel” as the input and output controls in [National’s] LabVIEW and thereby suggested the same “live” nature of those controls; (2) *MathWorks’ Simulink product did not provide “live inputs” prior to December 1996 (corresponding to the release of Version 2.0)*; and (3) even after December 1996, the input mechanisms for Simulink did not resemble typical physical controls and therefore did not convey the same “live” nature as the inputs in the Dials & Gauges Blockset. *Throughout this case, National Instruments has asserted that infringement requires “live” inputs—* which the Dials & Gauges Blockset clearly provides . . . .

\* \* \*

Prior to December 1996, Simulink did not provide “live” inputs, nor did its appearance suggest that it provided such inputs. Thus, *under National Instruments’ position in this case that infringement requires this “live” feature, MathWorks’ infringement did not begin prior to December 1996*, which falls within six years of the filing of the present lawsuit, thereby itself eliminating any presumption of laches. . . .

\* \* \*

MathWorks suggested that National Instruments’ position is defeated because one of its technical experts, Dr. Rhyne, has opined that infringement of some of the asserted claims does not require “live” inputs.



MathWorks' Reply at 4. *MathWorks conveniently ignores that National Instruments' other technical expert, Dr. Cox, has opined that infringement of all of the asserted claims requires "live" inputs* (thereby excluding pre-1996 versions of Simulink) . . . . Consequently, the opinions of National Instruments' technical experts support ***National Instruments' position that it was reasonable for it to raise the patent issue after MathWorks added the "live" input feature to Simulink in December 1996 and introduced the Dials and Gauges Blockset in 1998.***<sup>[4]</sup>

(A27160–61 (underline emphasis in original)) These direct statements present National's clear and unqualified position that all claims require "live" inputs.<sup>5</sup>

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<sup>4</sup> As these excerpts from National's summary-judgment briefing show, National's infringement case focused considerably on the Dials & Gauges Blockset. (A3832–33, A3834–38, A3962, A3964, A3966–67, A4027–31, A4125, A4127–28, A4145, A4201, A4206–07, A4332–33, A4663–64, A5182, A27117–18, A27123–25, A27138, A27158, A27160–61, A27165, A27484–85, A27518) To comply with the district court's injunction, MathWorks also modified this product, removing all dials (a particular subset of source blocks). The product was renamed the Gauges Blockset, and National concedes that this redesigned product does not infringe. (A27209)

<sup>5</sup> In National's brief to this Court (NIB 49–50), it now claims that, even as late as the time of its surreply on laches and estoppel, its position on "liveness" remained uncertain, relying on two statements from its surreply to make this claim. Neither statement, however, remotely suggests uncertainty.

The first statement—that "'National Instruments has explained that infringement of all (or at least several) of the claims requires 'live inputs'" (NIB 49 (quoting A27161 (citing A27124)))—is a direct quotation of National's position on "liveness" asserted in its opening response on laches and estoppel, and was repeated not for the point that National's position was uncertain, but rather to support the simple point that a finding of infringement depended on a "live" product. (A27160–61) As to that point, and as set forth in the block quotations

Indeed, National’s focus on MathWorks’ introduction of the Dials & Gauges Blockset in 1998, which National argued especially revealed “liveness,” demonstrates the centrality of “liveness” to National’s infringement claims.

National now contends, nonetheless, that during the summary-judgment briefing MathWorks “acknowledged” that non-“live,” pre-1996 versions of Simulink would be adjudicated at trial. (NIB 19) In an attempt to support this contention, National quotes a portion of a sentence in MathWorks’ summary-judgment reply brief, in which MathWorks wrote that “National *admits* that it has

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(continued...)

above, National then clarified in its surreply that *all* of the patent claims required “liveness” to find infringement. (*Id.*)

The other statement—that, “[e]ven if it is ultimately found that infringement of some of the claims does not require ‘live’ inputs, a genuine issue of fact exists as to the reasonableness of NI’s failure to assert infringement at an earlier time” (NIB 50 (quoting A27162))—is equally unresponsive of an “uncertain” position on “liveness” at the time of National’s surreply. That “even if” statement—asserting a contingency argument in the event National’s “liveness” position did not prevail—only highlights that the fundamental position that National asserted was that *all* claims require “liveness.”

Moreover, any equivocation by National on the importance of “liveness” to its claims, at that late stage of the proceedings (*i.e.*, after claim construction), would have injected an uncertainty into the scope of the claims inimical to the definiteness requirement of 35 U.S.C. § 112 (2005). *See, e.g., Honeywell Int’l Inc. v. ITC*, 341 F.3d 1332, 1338–39 (Fed. Cir. 2003); *cf. also, e.g., Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) (Patentees may not construe claims “one way in order to obtain their allowance and in a different way against accused infringers.”).

accused pre-1996 versions of Simulink of infringing ‘some’ claims *because it refuses to state that ‘all’ claims require ‘live’ inputs.*” (A27147 (emphasis added))

But that passage was MathWorks demonstrating to the court that National’s initial “all or at least several” equivocation was not an effective response to MathWorks’ motion. By refusing to state that *all* claims require “live inputs, National had no basis on which to eliminate pre-1996, non-“live” versions from the scope of its infringement suit. This, in turn, undermined National’s opposition to the application of laches and equitable estoppel, because National should have asserted much sooner any infringement by the non-“live” products of those claims that supposedly did not require “live” inputs. As already shown, National addressed this weakness when it asserted in its surreply—as it had to—that *all* of the claims-in-suit require “live” inputs and that infringement did not begin until 1996 when “liveness” was introduced into Simulink version 2.0. (A27160–61)

The district court denied MathWorks’ summary-judgment motion on laches and equitable estoppel on November 6, 2002. (A6034)

**National’s Expert Reports and Depositions.** The assertions of National’s experts further demonstrate National’s formulation and assertion of its consistent position on “liveness.”

Dr. Cox, one of National’s technical experts, clearly asserted that “liveness” was required by all claims-in-suit, thereby concluding that the prior art, which did

not have “liveness,” did not anticipate, and that the “live” versions of Simulink at trial infringed, but earlier versions did not. For instance, in his validity report, Dr. Cox wrote that “the word ‘control’ that the Court has chosen to name the graphical representations of inputs and outputs in a front panel, denotes the key characteristic of interactivity,” and, as National acknowledged at the hearing on its contempt motion, “both parties have used [‘interactivity’] synonymously with live inputs.” (A27845, A27494) Dr. Cox elaborated that this interactivity “is under the control of the user, not the program; so the user can change the values of inputs and observe output values *at any time, even while the program is running.*” (A27494 (emphasis added)) He concluded that, “because of this *lack of interactivity*, Prograph [prior art presented at trial] does not teach front panel as defined by the Court.” (*Id.* (underline emphasis in original))

In his infringement report, Dr. Cox similarly asserted that Simulink satisfied the “front panel” claim limitation because it was interactive—it allowed the user “to input values and observe values *during execution of the associated diagram.*” (A27497 (emphasis added)) And Dr. Cox confirmed in his deposition that the requirement of interactivity is “implicit in the word ‘control’” in the definition of “front panel.” (A27527) Likewise, when asked whether “the Court’s definition of an input variable icon and output variable icon requires *interactivity while the*

*program is running,”* Dr. Cox testified, without limitation, “Yes.” (A27526 (emphasis added))

Mr. Sherwin, National’s damages expert, also repeated National’s position that *all* of the claims require “liveness.” Shortly before trial, Mr. Sherwin declared in his third supplemental report that he was “advised by counsel for National Instruments that ***the position of National Instruments*** has been that *the claims of the patents in suit require ‘live inputs’* and that the first version of Simulink to incorporate such ‘live inputs’ was Simulink version 2.0 released in December 1996.” (A27531 (emphasis added)) Indeed, “key employees of National” advised Mr. Sherwin that non-“live” products would not be “commercially acceptable” noninfringing alternatives because National viewed “live” inputs as “a necessary component for commercial viability.” (A27533) Mr. Sherwin justified an enhanced “reasonable royalty rate” on the basis that returning to the pre-1996 pause behavior, although a design-around, was not viable, because having “live” inputs was so important for commercial viability.<sup>6</sup> (*Id.*)

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<sup>6</sup> National now contends that “Mr. Sherwin clearly state[d] that whether all or only several of the claims require ‘live’ inputs, as disputed by NI’s technical experts ‘remains unresolved.’” (NIB 53 (quoting A27369)) National’s assertion takes the words “remains unresolved” out of context and results in a misleading argument. While Mr. Sherwin acknowledged that different positions on “liveness” had been taken, Mr. Sherwin clearly stated that “***the position of National Instruments*** has been that the claims of the patents in suit require ‘live inputs.’” (A27368 (emphasis added)) In other words, National, the party asserting the

Dr. Rhyne, National's other technical expert, did not take a contrary view. Indeed, although he claimed during his deposition to have no position on "live" inputs (A27542–43), he asserted in his report on validity that the prior art does not anticipate any of National's patent claims, because, unlike National's claims, the prior art did not permit "live" inputs: He opined that (1) the Sutherland prior art does not disclose key claim limitations of "input variable-icons" or "front panels" because it pauses, (2) the Prograph prior art also lacks "input variable-icons" because, in part, execution halted or paused, and (3) the MATRIX<sub>x</sub> prior art lacks "input controls" and a "front panel" because "[d]ata could not be provided to or from the simulation while it was running." (A27537–39) Indeed, at trial, even Dr. Rhyne, whose position National now seeks to embrace, acknowledged that

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(continued...)

patents, disagreed with the position of one of its experts, who at one point sought to limit "liveness" to five of the asserted claims. What "remain[ed] unresolved" was the *parties'* dispute whether "live" inputs were required for all or none of the claims, and the effect that answer might have on the invalidity case, not any dispute between National's experts. (A27369 ("I further understand that the *parties* are continuing to discuss the matter and the issue remains unresolved." (emphasis added))) The theory that National was advancing for decision at trial was clear—all claims required "live" inputs, and Mr. Sherwin provided damages calculations based on an alternative position that no claims required "live" inputs only in the event that National's position did not ultimately prevail. (A27368–69)

National's position was different from his—and that National's position was that *all* claims required “live” inputs.<sup>7</sup> (A3311)

**National's Offer of a Compromise on its Position that All Claims Require “Liveness.”** Just nine days before trial, on January 5, 2003, National again confirmed its position that all claims require “liveness.” In a letter to MathWorks, National suggested that the parties “compromise” from their respective all-or-none positions on “live” inputs and agree that only five of the claims at issue require “live” inputs. (A28657)

Although National now seeks to point to its compromise offer as evidence that its trial position was that only the five “real-time” claims required “live” inputs (NIB 53–54), that reading of the letter is disingenuous. If National's position was that only five claims required “liveness,” then there was no compromise being

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<sup>7</sup> In light of this testimony, National has no basis to assert that, at trial, it adopted the opinion of Dr. Rhyne that only the five “real time” claims require “live” inputs. (NIB 53-54, 65) For one, Dr. Rhyne did not have as pristine an opinion on the issue of pausing as National seems to imply. When he opined in his validity expert report that the prior art does not anticipate because it pauses and does not permit “live” inputs, he did so in connection with the claim terms “input variable-icon” and “front panel,” one or the other of which is found in all fifteen claims at issue—he did not limit his opinion to the five “real time” claims. (A27537–39) And during his deposition, Dr. Rhyne even went so far as to claim to have taken no position on “live” inputs. (A27542–43)

Beyond that, and as noted above, National did *not* adopt Dr. Rhyne's position at trial. Dr. Rhyne himself acknowledged at trial that *National's position* was that *all* claims required “live” inputs. (A3311)

proposed in the letter. The letter’s suggestion—that the parties *compromise* and agree that only five claims require “liveness”—makes sense only if National’s position *was* that *all* claims required “live” inputs. National’s misleading presentation of this letter should be rejected.

MathWorks declined the proposed compromise, telling National that MathWorks was relying on National’s position that *all* claims require “live” inputs. (A28706) National did not respond and did not refute that position, and nothing further occurred with the proposed compromise. The following week, the parties proceeded to trial, and National proceeded with its position that all of the claims require “live” inputs.

**D. National Based Its “Liveness” Requirement On The District Court’s Claim Construction**

National advocated the requirement of “liveness” based on the court’s claim construction. Specifically, National found its “liveness” requirement in two claim limitations, which, according to National, were met by Simulink’s post-1996, “live” source blocks: (1) “input variable-icon,” and (2) “input control” (found in the “front panel” limitation). One or the other of these key claim limitations appears in every claim found infringed.

During claim construction, the court construed “input variable-icon” to mean “a graphical image that represents a symbol whose value is entered into the system by the user for processing,” and it construed “front panel” to mean “a graphical



user interface that is separate and apart from the associated data flow diagram and that displays inputs and output controls, where there is at least one input control and at least one output control in the front panel.” (A14–15) Although the district court did not construe the term “input control” found in the “front panel” limitation, National stated that the word “control” required the user to have the ability to simultaneously control the inputs and observe the outputs—in other words, the inputs had to be “live.” (A27494) National further explained that “input control” and “input variable-icon” are synonymous. (A27493, A27498, A27513–15) Thus, according to National, because (i) “input control” required “live” inputs; (ii) “input control” is synonymous with “input variable-icon”; and (iii) “input variable-icon” is found in all of the claims at issue, all of the claims therefore require “live” inputs. MathWorks’ modified Simulink avoids infringement by removing “live” inputs.

### **SUMMARY OF ARGUMENT**

I. This Court reviews the district court’s denial of National’s contempt motion under the highly deferential abuse-of-discretion standard. Contrary to National’s erroneous urging of *de novo* review, which is based on the unfounded and improper supposition that this case concerns only the legal issue of *res judicata*, this case involves the district court’s equitable discretion to police its own injunctions, which is reviewed for abuse of that discretion.

II. The district court’s denial of National’s contempt motion was factually and legally proper, and certainly did not amount to an “abuse of discretion” or a “clear error of judgment.” MathWorks’ design-around, whose pause behavior replicates the behavior found in early versions of Simulink that National explicitly identified as precluding infringement, and that were not adjudicated at trial, is far from a “flagrant disregard for court orders.” Indeed, the district court itself acknowledged National’s position on “liveness” by confirming that early versions of Simulink were neither at issue nor adjudicated in the 2003 trial. The district court thus properly exercised its discretion in determining that the modified product should not be summarily adjudicated in a contempt proceeding.

III. National’s new theory on appeal, premised on “res judicata” arguments, is disingenuous and wrong. In its own contempt papers, National acknowledged that pre-1996, non-“live” versions of Simulink were *not* adjudicated at trial; therefore, National’s own prior words betray its current argument that, under principles of *res judicata*, litigation of version 1.3 should bar litigation of redesigned Simulink version 6.1, whose pause behavior replicates that of version 1.3. In any event, the theory was not properly presented to the district court and was thereby waived. And, even if the theory were not waived, National’s “res judicata” theory is meritless. Even without the betrayal of National’s own words,

it is clear that the theory rests upon the erroneous and unfounded supposition that the pause behavior in Simulink version 6.1 was, in fact, adjudicated at the prior infringement trial and covered by the injunction. During the hearing on National's contempt motion, the district court found that the infringement trial and injunction "had nothing to do with pre-1996" versions of Simulink. That finding was not clearly erroneous, and certainly not an abuse of discretion—particularly given National's consistent position that pre-1996 versions do not infringe because of their pause behavior.

IV. Judicial and equitable estoppel, arguments raised by MathWorks but not (contrary to National's contention) reached by the district court, present independent legal grounds for affirming the district court's denial of National's contempt motion. Having prevailed on its earlier position that *all* of the claims require "liveness"—to avoid summary judgment of laches and estoppel, to establish validity of its patents, and to succeed on issues of infringement and damages—National is bound to its earlier position on "liveness," and therefore has no basis for changing course just to support its contempt motion.

## ARGUMENT

### **I. THE DISTRICT COURT’S DENIAL OF NATIONAL’S CONTEMPT MOTION IS REVIEWED UNDER THE DEFERENTIAL ABUSE-OF-DISCRETION STANDARD, NOT *DE NOVO* AS NATIONAL CLAIMS**

The district court’s denial of National’s contempt motion is reviewed for an abuse of discretion, in accordance with Federal Circuit law. *See Int’l Rectifier Corp. v. Samsung Elecs. Co.*, 361 F.3d 1355, 1359 (Fed. Cir. 2004); *see also KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1530 (Fed. Cir. 1985) (determination of “whether infringement should be adjudicated in contempt proceedings” involves “the exercise of judicial discretion”).

This Court has repeatedly recognized that the abuse-of-discretion standard requires significant deference to the determinations of the district court: “So long as the district court exercises its discretion to proceed or not to proceed by way of contempt proceedings within [the Federal Circuit’s] general constraints, [the Court] must defer to its judgment on this issue.” *KSM*, 776 F.2d at 1532; *accord Neal & Co. v. United States*, 121 F.3d 683, 684 (Fed. Cir. 1997) (“Such abuses must be unusual and exceptional; we will not merely substitute our judgment for that of the [trial court].” (quoting *PPG Indus., Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1572 (Fed. Cir. 1988) (Bissell, J., additional views))); *L.E.A. Dynatech v. Allina*, 49 F.3d 1527, 1530 (Fed. Cir. 1995) (describing abuse-of-discretion standard as “highly deferential”); *Fraige v.*

*American-National Watermattress Corp.*, 996 F.2d 295, 297 (Fed. Cir. 1993)

(Abuse of discretion occurs when the “decision is based on . . . a clearly erroneous finding of fact . . . or the court’s decision is clearly unreasonable, arbitrary or fanciful.”).

National’s proposal of *de novo* review, based on its “res judicata” arguments (NIB 9–13), is wholly untenable. This Court has clearly and consistently stated that it “review[s] the district court’s decision to proceed via a contempt hearing for abuse of discretion.” *Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc.*, 154 F.3d 1345, 1349 (Fed. Cir. 1998); *accord Int’l Rectifier*, 361 F.3d at 1359; *Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 881 (Fed. Cir. 1995); *Arbek Mfg., Inc. v. Moazzam*, 55 F.3d 1567, 1570 (Fed. Cir. 1995); *KSM*, 776 F.2d at 1532. The abuse-of-discretion standard honors the district court’s “broad discretion to determine how best to enforce its injunctive decrees,” *Additive Controls*, 154 F.3d at 1349, and recognizes the district court’s superior ability to make the sensitive equitable judgments required by the contempt standard—in particular, the question of whether a redesigned product presents “substantial open issues with respect to infringement” that were not adjudicated in the earlier trial. *KSM*, 776 F.2d at 1532. *De novo* review is simply inapplicable.

In asserting that the *de novo* standard governs this Court’s appellate review (NIB 10), National misreads *KSM*’s reference to application of “principles of claim

and issue preclusion (*res judicata*).” 776 F.2d at 1532. *KSM* makes clear that principles of claim and issue preclusion aid the district court in determining “what issues were settled by the original suit and what issues would have to be tried”—in order to determine whether a contempt proceeding or a separate infringement action is the appropriate forum in which to entertain infringement allegations. *Id.* That determination—which is the issue on review by this Court—is a “*procedural* one,” *id.* at 1531 (emphasis in original), and is itself reviewed under the abuse of discretion standard, *id.* at 1532. Indeed, even “where it is evident that the modifications do not avoid infringement and were made for the purpose of evasion of the court’s order”—which is *not* the case here—this Court has explicitly stated that the standard is whether there are “substantial open issues” or more than “colorable differences” between the two devices—determinations that this Court reviews for an abuse of discretion. *KSM*, 776 F.2d at 1526, 1531–32.

## **II. BECAUSE THE EVIDENCE COMPELLED ITS DECISION, THE DISTRICT COURT DID NOT ABUSE ITS DISCRETION IN DENYING NATIONAL’S CONTEMPT MOTION**

When a patentee seeks a contempt proceeding against a product that has been redesigned in good faith by the party subject to an infringement injunction, the general rule is that such a proceeding is inappropriate “‘unless it is *quite clear* from the surrounding circumstances that [a contempt proceeding] is required to preserve the integrity of the injunction.’” *KSM*, 776 F.2d at 1532 n.7 (emphasis

added) (quoting *Baltz v. The Fair*, 279 F.2d 899, 903 (7th Cir. 1960)). Contempt should be used only as a “shield protecting the patentee against an infringer’s flagrant disregard for court orders . . . not [as] a sword for wounding a former infringer who has made a good-faith effort to modify a previously adjudged or admitted infringing device to remain in the marketplace.” *Arbek Mfg.*, 55 F.3d at 1570.

In considering a contempt motion that challenges a former infringer’s redesigned products, the district court is governed by a two-step inquiry. The first is a threshold, procedural question: “whether a contempt hearing is an appropriate forum in which to determine whether a redesigned device infringes, or whether the issue of infringement should be resolved in a separate infringement action.” *Additive Controls*, 154 F.3d at 1349 (citing *KSM*, 776 F.2d at 1530–32).

Essentially, this threshold inquiry asks whether “there are substantial open issues with respect to infringement.” *KSM*, 776 F.2d at 1532. To further aid district courts in evaluating contempt motions, this Court has described the initial inquiry in additional ways. For instance, a district court may compare the adjudged and newly accused devices to determine whether they are more than “colorably different”—a comparison made in light of the patent claims included in the injunction. *See Additive Controls*, 154 F.3d at 1349; *KSM*, 776 F.2d at 1530–31 (quoting *Am. Foundry & Mfg. Co. v. Josam Mfg. Co.*, 79 F.2d 116, 117–18 (8th

Cir. 1935)). A “merely colorable” alteration is one “‘obviously . . . made for the purpose of evading the decree without essential change in the nature of the device.’” *KSM*, 776 F.2d at 1531 (quoting *Radio Corp. of Am. v. Cable Radio Tube Corp.*, 66 F.2d 778, 783 (2d Cir. 1933)). When the two devices are more than colorably different, the summary proceedings afforded by contempt cannot go forward. *Id.* Stated other ways, contempt proceedings cannot go forward if there is “*fair ground of doubt* as to the wrongfulness of the defendant’s conduct,” *id.* at 1525 (emphasis in original); *Preemption Devices, Inc. v. Minn. Mining & Mfg. Co.*, 803 F.2d 1170, 1173 (Fed. Cir. 1986), or if “expert and other testimony subject to cross-examination would be helpful or necessary,” *KSM*, 776 F.2d at 1531; *Additive Controls*, 154 F.3d at 1349.

When a district court determines that the infringement (or other) issues are too substantial to be evaluated in a summary contempt proceeding, the motion must be denied. If it so chooses, the patentee may then raise its allegations in a separate action, as National has done by bringing an infringement counterclaim in the declaratory-judgment action initiated by MathWorks. *See MAC Corp. of Am. v. Williams Patent Crusher & Pulverizer Co.*, 767 F.2d 882, 886 (Fed. Cir. 1985).

If, however, the district court determines that there are no substantial issues about infringement so that contempt proceedings may go forward, the court turns to a second, substantive inquiry: the merits of the patentee’s infringement



allegations. *Additive Controls*, 154 F.3d at 1349 (citing *KSM*, 776 F.2d at 1528–30). Infringement is established by comparing the modified device to the patent claims included in the injunction. *See id.*; *Preemption Devices*, 803 F.2d at 1175; *KSM*, 776 F.2d at 1530. The patentee “bears the heavy burden of proving violation by clear and convincing evidence.” *See KSM*, 776 F.2d at 1524.

**A. The District Court Was Correct To Find “That The Defendant’s New Version Of Its Simulink Product Is More Than Colorably Different From The Product Found To Infringe At Trial”**

MathWorks’ redesign of its product to avoid infringement is far from a “flagrant disregard” for the injunction. *See Arbek Mfg.*, 55 F.3d at 1570. The district court properly determined that MathWorks’ “new version of its Simulink product is more than colorably different from the product found to infringe,” and that, at a minimum, “[s]ubstantial [infringement] issues remain to be litigated,” compelling denial of National’s motion. (A1) *See KSM*, 776 F.2d at 1530–31. Certainly, because of the evidence before it, the court did not abuse its discretion in reaching its conclusions and denying National’s motion.

As the evidence showed, non-“live,” redesigned version 6.1 is more than colorably different from the “live” versions of Simulink shown and adjudicated at trial (versions 4.1 and 5.0). Version 6.1 likewise presents substantial open issues with respect to infringement, because it re-implements precisely the pause behavior that National explicitly identified as precluding infringement (and, further, as

precluding commercial viability and avoiding invalidity by prior art). As the district court rhetorically put it to National, “[N]ow that [MathWorks has] adopted [the pause behavior] again, I’m supposed to say there’s no substantial question[?]” (A27827) The district court rightly answered its question in the negative by denying the contempt application. Even when described most favorably to National, MathWorks’ re-implementation of the pause behavior to not permit “live” inputs in version 6.1 presented at least a “fair ground of doubt as to the wrongfulness of [MathWorks’] conduct.” *KSM*, 776 F.2d at 1525. In short, the district court did not abuse its discretion in denying National’s contempt motion.

The deference owed to the district court here mirrors that given in *MAC Corporation of America v. Williams Patent Crusher & Pulverizer Co.*, 767 F.2d 882, 885–86 (Fed. Cir. 1985), in which this Court affirmed the denial of a patentee’s contempt motion. In affirming the district court’s judgment that the defendant’s modified device presented substantial open infringement issues, this Court observed that the district court “had been deeply versed in the underlying facts and circumstances of the dispute,” and had presented a “clear, unequivocal statement that he read and considered the briefs and affidavits, that he recognized that there was some difference in the enjoined and now accused [devices], and that a ‘fair ground for doubt’ on infringement existed.” *Id.* at 886.

Here, the district court similarly invoked its superior knowledge and understanding of the earlier trial and the injunction that it crafted. The court stated unequivocally that the infringement trial “cabined [the] inquiry about post-1996” versions, that the issues submitted to the jury “had nothing to do with pre-1996” versions, that the injunction was never intended to reach pre-1996 versions, and that “[s]ubstantial issues remain to be litigated” with regard to infringement by version 6.1, which re-implemented the pause behavior of the unadjudicated pre-1996 versions. (A27915–16, A1) As in *MAC Corporation*, the district court did not abuse its discretion in preventing National’s contempt motion from going forward.

In the face of the district court’s findings and conclusions, National attempts to satisfy its heavy burden on appeal by contending that MathWorks’ Rule 36 answer from pretrial discovery is a “judicial admission” that “infringement did not depend on the version of Simulink being considered.” (NIB 36–38) Putting aside the fact that the district court found this argument unconvincing, National rather aggressively overstates MathWorks’ Rule 36 answer. MathWorks merely stated there that *none* of MathWorks’ products infringed the patents-in-suit, regardless of the version—the same position that MathWorks took on claim construction, on the basis that Simulink did not practice data flow, a limitation of each and every claim.

And MathWorks certainly did not admit that pre-1996 versions of Simulink were going to be adjudicated at the trial that took place eight months later. Indeed, MathWorks first objected to National’s Rule 36 request, to the extent that the request “suggests that National is not required to prove at trial that *each version* of its Simulink product and any other accused product infringes the patents-in-suit . . . [or] that National can recover damages or obtain injunctive relief with respect to any accused product by relying upon a finding of infringement of a *single version* of Simulink or any other accused product.” (A27773 (emphasis added)) Further, at the time MathWorks answered the Rule 36 request, National had not yet formulated its position that the pre-1996 versions do not infringe (nor did it have any reason to until the later summary-judgment briefing on laches and equitable estoppel). National cannot manufacture an abuse of discretion out of its unreasonable *post hoc* interpretation of its Rule 36 request or MathWorks’ answer to it.

In another attempt to manufacture an abuse of discretion, National argues that when it took the position, during summary-judgment briefing, that “infringement did not begin prior to December 1996” (A27161), it was referring only to MathWorks’ laches defense against damages relief and not to MathWorks’ estoppel defense against injunctive relief: In its brief to this Court, National now argues that “[t]he statement that ‘infringement did not begin prior to December

1996’ was not intended to apply to the claim for injunctive relief, but only to the claim for damages.” (NIB 50) This argument is ludicrous. The sweeping statement that “infringement did not begin” does not say anything about the type of relief sought. If, as National said, “infringement did not begin prior to December 1996” for purposes of damages—notably, a position that National reaffirms before this Court (*id.*)—then “infringement did not begin prior to December 1996” with respect to *any* relief requested, including injunctive relief. Thus, the statement in National’s summary-judgment briefing provides absolutely no support for its about-face claim that pre-1996 products were adjudicated. In short, National’s efforts to manufacture an abuse of discretion fail.

**B. The District Court Was Also Correct To Find “That The Clear And Convincing Standard Has Not Been Met With Respect To Infringement”**

Because the evidence established, at the very least, substantial open issues with respect to the infringement analysis, the district court also properly determined that “the evidence is not sufficient for me to find from a clear and convincing standard that there is infringement.” (A27920) As concluded by outside, non-litigation patent counsel whom the district court recognized as “a qualified expert” (A27908), Simulink version 6.1 does not infringe—much less clearly and convincingly. (A27567–612) Indeed, in light of National’s prior position on “live” inputs, National could not possibly have established by clear and

convincing evidence (nor by any lesser standard of proof) that the redesigned products infringe the patent claims.

**C. The District Court’s Denial Of National’s Motion Was Also Proper With Regard To The Other Features Challenged By National**

In denying National’s contempt motion, the district court properly rejected National’s contention that certain other features offered with Simulink version 6.1 should be adjudicated in a contempt proceeding. These other features also present, *at the very least*, substantial open issues with respect to infringement, and certainly do not permit a finding of infringement by clear and convincing evidence. Here again, outside patent counsel concluded that none of these features infringes or warrants a contempt proceeding. (A27569–72, A27591, A27607)

**External Mode.** In addition to its “normal” mode of operation, Simulink version 6.1 provides an external mode, which was present in prior versions, such as pre-1996 Simulink version 1.3. (A27618–21) External mode allows communication between two separate computers: (1) a host computer that runs the Simulink software, and (2) a target (“external”) computer that executes textual computer code and has no blocks or lines as in Simulink and as the claims require. (A27618–19) The addition of the target computer allows the user to control an external device, such as a car’s anti-lock brake system, through that computer. (A27618–20)

Before the district court, MathWorks presented three independent reasons why the operation of version 6.1 in external mode did not warrant adjudication in a contempt proceeding.

*First*, external mode does not reintroduce “liveness” into Simulink version 6.1, because the user cannot change inputs in the Simulink software (which is running on the host computer) and simultaneously observe the outputs (also on the host computer). When the user, operating Simulink version 6.1 in external mode, changes an input, the software, running on the host computer, pauses exactly the same as in normal mode. (A27619–20)

National’s contempt argument to the contrary depends on an erroneous assumption that the target computer is the source of “live” inputs needed to satisfy the “input variable-icon” and “input control” claim requirements. (NIB 31–36) But the target computer does not permit “live” inputs, because the inputs are provided by the *host* computer, and communication between the two computers is disabled when the user opens a source-block dialog box to change the parameters. (A27619–20)

As a result of external mode’s operation, the target computer has nothing to do with the “input variable-icon” and “input control” limitations. It is thus irrelevant that the code running on the target computer does not halt when the inputs are provided to the Simulink software running on the host computer.

*Second*, version 1.3 offered external mode, and the identified “pause” behavior was present regardless of operation in either external or normal mode. Likewise, the pause behavior in version 6.1, which replicates the pause behavior in version 1.3, is present in both normal and external modes. (A27620–21) Because National has consistently stated that version 1.3 does not infringe because it pauses, the pause behavior in version 6.1 compels the same conclusion of noninfringement.

*Third*, and finally, National’s present challenge against external mode was never raised, much less adjudicated, in the infringement trial, and thus should not be addressed in the first instance in a contempt proceeding. At trial, National never argued that the target computer is the source of “live” inputs needed to satisfy the “input variable-icon” and “input control” limitations of the patent claims—the limitations that National now seeks to apply. Indeed, external mode was addressed merely three times, and then always in the context of the “executable code” limitation in ‘336 patent claims 1 and 30 (and in four claims of the ‘587 patent that were found not infringed). (A27654–55)

For these reasons, taken separately or together, the district court did not abuse its discretion in declining to adjudicate external mode in a contempt proceeding.



**External-Time Option.** A new feature offered with Simulink version 6.1 is the external-time option (what National now calls the “time-terminal modification”). The external-time option allows the user to configure certain blocks as either a source block or a function block. (A27625–26) Without the external-time option selected, the blocks are source blocks that provide input signals to the model; with the external-time option selected, the blocks are *function* blocks that compute output values based on a separate source block’s input signals provided to the function block through an input port. (A27626–27)

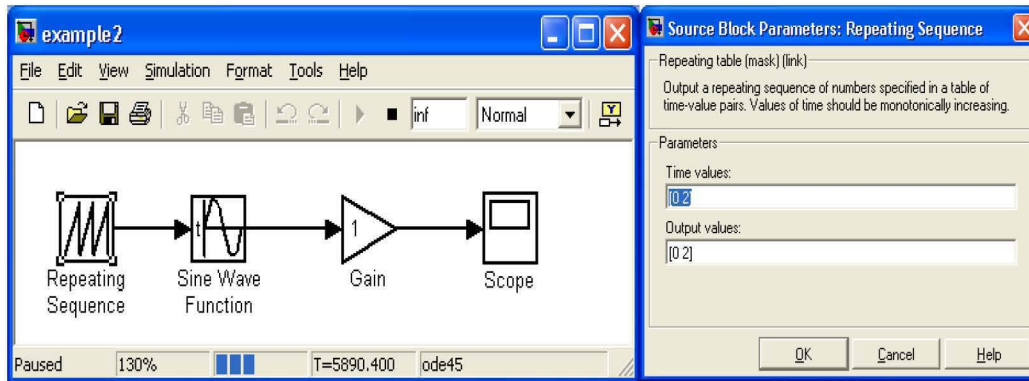
As MathWorks showed below, the external-time option is a new feature, legitimately developed and marketed. (A27625) Accordingly, the external-time option at least presents “substantial open issues” with respect to infringement and is, by definition, a product that is more than “colorably different” from the products adjudged to infringe. *See KSM*, 776 F.2d at 1530–32.

In any event, National continues to mischaracterize how the external-time option works, and why it does not satisfy the “input variable-icon” and “input control” claim limitations. A block set to the external-time option does not implicate the “input variable-icon” and “input control” claim limitations because the block operates as a *function* block, not a source block, and *source* blocks are the specific class of blocks that National has always identified as satisfying the “input variable-icon” and “input control” limitations. Function blocks, on the other

hand, satisfy separate claim limitations, according to National. Therefore, when the external-time option is selected, the block, contrary to National's assertion (NIB 40), does not remain an "input variable-icon"—it is no longer the first block in the model, providing input.

Several characteristics demonstrate that a block set to the external-time option is in fact a function block. For one, the block's graphical appearance reflects its state as a function block. An input port appears on its left wall, and a "t" appears inside the block—enabling the block to receive input signals from a source block. (A27626–27) For another, external-time blocks are located in the function-block libraries, not source-block libraries. (A27627–28) And, like other function blocks, if the user fails to connect another block to a function block's input port, Simulink generates a warning message, because a function block requires inputs to properly operate. (A27629)

With this correct characterization, National's contempt allegations against the external-time option fail. A block set to the external-time option is a function block, and when a user opens a source block connected to this function block, Simulink still pauses, as the figure below shows.



Thus, the new external-time option does not alter Simulink version 6.1’s noninfringement.

For these reasons, the district court did not abuse its discretion in determining that adjudication of the external-time option is outside the scope of a summary contempt proceeding.

**Model Explorer.** Model Explorer is another new feature in Simulink version 6.1 and was not part of the product at the time of trial. It provides users with, among other things, an alternate mechanism for accessing and changing block parameters. Specifically, Model Explorer provides a hierarchical mechanism for accessing block parameters that the user may want to view or change.

(A27621)

Again, as MathWorks showed below, the newly added Model Explorer, which was legitimately developed and marketed, presents at least “substantial open issues” with respect to infringement and is, by definition, more than “colorably

different” from the products adjudged to infringe. *See KSM*, 776 F.2d at 1530–32. Moreover, the evidence presented below—including National’s own evidence, which it duplicates in its brief on appeal (NIB 43 (Figure 6); *see also* A27232 (Figure 10))—show that this feature does not infringe, because it does not reintroduce “liveness” into Simulink version 6.1. As National’s Figure 6 reveals, Simulink version 6.1, which always displays in the lower left corner of the model window whether its state is “Ready,” “Running,” or “Paused,” shows that the model is *paused* when inputs are accessed using Model Explorer. (NIB 43)

National thus errs in urging a theory of “exacerbation” or “enhancement” of “infringement” (NIB 6, 31) with regard to Model Explorer. Because Model Explorer does not permit “live” inputs, it does not infringe at all, much less exacerbate or enhance infringement. Accordingly, the district court did not abuse its discretion in declining to proceed via contempt with regard to Model Explorer.

In sum, because (at the very least) substantial open issues existed with regard to the infringement inquiry, the district court properly denied National’s contempt application in its entirety.

### **III. NATIONAL’S “RES JUDICATA” ARGUMENTS ARE BOTH WAIVED AND WITHOUT MERIT**

National’s own words betray its new and diversionary claim that “res judicata” governs the issues on appeal: In its contempt motion, National acknowledged that “no . . . pause occurred in the adjudicated products” (A27218),

and National identified Releases 12.1 and 13 (the releases that included Simulink versions 4.1 and 5, respectively) as the “adjudicated products” (A27214).

National’s statements—acknowledging that the pause behavior was *not* present in the products that were adjudicated—are all that the Court needs in order to reject National’s new “res judicata” theory and its false premise that the earlier version 1.3, with its pausing behavior, was “tried in the original case” and “adjudged to infringe.” (NIB 7, 13; *see also id.* at 2, 12, 14, 16, 21, 24–25)

Even beyond the demonstrably false premise of its “res judicata” theory, National’s argument fails on numerous other grounds, too. As an initial matter, National raises its newfound “res judicata” theory far too late in these proceedings. Although National now suggests that the theory was the premise of its contempt motion, even National did not view a “res judicata” theory seriously in the proceedings below. (It could not have, in view of its concession that the pausing, pre-1996 versions were not among the “adjudicated products.” (A27214, A27218)) Instead, National premised its contempt motion on the view that, although there were changes to Simulink, they were inadequate to move beyond the injunction. National argued: “The central issue now before [the district court] is whether MathWorks’ recently-released ‘modified’ Simulink products have been modified *enough* to avoid infringement—and thus to avoid [the] injunction.” (A27205) National maintained that position in its reply brief, never challenging

MathWorks’ position that the redesigned product mimics the *noninfringing* pause behavior found in version 1.3. (A27442, A27446–48, A27450–55, A27459, A27461, A27463, A27465, A27467, A27473, A27476–77)

Nowhere in National’s contempt briefs is there even a suggestion that the earlier version 1.3 was actually adjudicated. The *single* reference to *res judicata* in National’s briefs before the district court was a reference only to the propriety of MathWorks’ separate declaratory-judgment proceeding—not to National’s contempt application. (A27211) That was woefully inadequate to apprise the district court or MathWorks of any “res judicata” arguments, and, although National discussed some “res judicata” arguments at the hearing on its contempt motion, National’s legal and factual analysis was slight, by no means alerting the district court to the theory National now seeks to advance, and for which it commits 16 pages of text and 66 footnotes and alleges the relevance of 26 cases. It is hardly fair to accuse a district court of “abusing” discretion when it was never asked to exercise its discretion on these grounds in the first place: National’s “res judicata” arguments should be considered waived. *See Singleton v. Wulff*, 428 U.S. 106, 120 (1976) (“It is the general rule, of course, that a federal appellate court does not consider an issue not passed upon below.”); *Clontech Labs., Inc. v. Invitrogen Corp.*, 406 F.3d 1347, 1357–58 (Fed. Cir. 2005) (holding that appellant “has effectively waived [certain] arguments by failing to raise them in a form that

required a decision by the trial court”); *Fuji Photo Film Co. v. Jazz Photo Corp.*, 394 F.3d 1368, 1377 (Fed. Cir. 2005) (“A few phrases . . . are not sufficient to apprise the district court that it must address another point of law.”); *id.* at 1375 n.4 (declining to consider “specter” of an issue raised in a footnote in initial brief, even though raised more fully in reply brief); *see also, e.g., John Wyeth & Bro. Ltd. v. CIGNA Int’l Corp.*, 119 F.3d 1070, 1076 n.6 (3d Cir. 1997) (explaining that “arguments raised in passing (such as, in a footnote), but not squarely argued, are considered waived”).

National cannot excuse its failure to present its “res judicata” arguments to the district court by contending that the arguments were simply a reply to MathWorks’ judicial and equitable estoppel arguments. (NIB 3–4) For one, MathWorks raised its judicial and equitable estoppel arguments in its initial brief, and National’s brief in reply contains no “res judicata” argument. For another, National’s “res judicata” arguments—that the pause behavior was litigated and decided in the infringement trial—do not in any fashion depend on MathWorks’ estoppel arguments, and thus could have, and should have, been addressed independently by National in its papers before the district court.

Even assuming that National’s Johnny-come-lately “res judicata” argument has not been waived, the argument lacks merit for the simple reason that infringement by the pre-1996 version with a pause behavior in it was neither

actually litigated nor adjudicated in the earlier trial. *See, e.g., Young Eng'rs, Inc. v. U.S. Int'l Trade Comm'n*, 721 F.2d 1305, 1314 (Fed. Cir. 1983) (*res judicata* does not apply to claims that were not litigated or decided in the earlier trial). As the district court properly observed at the hearing on National's contempt motion, the infringement trial "cabined [the] inquiry about post-1996," and the issues submitted to the jury "had nothing to do with pre-1996" versions. (A27915–16) Indeed, "[i]t never crossed [the court's] mind that we were trying anything [other than post-1996 versions]," and the court "never considered that [the parties] were trying anything other than the later versions of the product" and never intended the injunction reach pre-1996 versions. (A27916–17) Thus, there was no need for the district court to apply *res judicata* principles here. Certainly, in light of the district court's first-hand knowledge of the infringement trial and the injunction that it crafted, as well as National's repeated statements throughout the trial that the pause behavior of pre-1996 versions avoided infringement, the district court did not abuse its discretion in determining that contempt proceedings were an inappropriate forum in which to adjudicate Simulink version 6.1, whose pause behavior replicates that of the admittedly not-adjudicated pre-1996 versions.

Although National attempts to have this Court believe that the district court "refused" to apply *res judicata* because of a "mistaken[]" understanding about the scope of a pre-trial stipulation on damages and laches (NIB 22), the entirety of the



trial proceedings led the court to properly observe that pre-1996 versions were not on trial for infringement. National’s repeated representations throughout the infringement trial that pre-1996 versions do not infringe because they do not permit “live” inputs—representations that went broadly to pre-1996 versions’ *noninfringement* (not just to National’s decision not to seek certain damages)—establish that the district court was not “mistaken” in concluding that pre-1996 versions were never tried, much less found to infringe.

Similarly, the evidence does not support National’s assertion that “MathWorks understood that all versions of Simulink were included in NI’s [infringement] claims.” (NIB 18–19) National’s support for this statement is trial testimony by Dr. Rhyne, who admitted that National’s position is that pre-1996 versions do not infringe, as well as trial testimony by Dr. Cox, who also testified that pre-1996 versions do not infringe. (NIB 19 n.53 (citing A3309, A3311, A3577)) While this testimony evidences that pre-1996 versions were *discussed* at trial, it provides absolutely no support for National’s bald assertion that pre-1996 versions were tried and found to infringe.

The injunction’s reference to “Simulink” does not assist National’s assertion. In *KSM*, this Court recognized that “injunctions are frequently drafted or approved by the courts in general terms,” but that such breadth does not permit unchecked use of the contempt power. 776 F.2d at 1526. Indeed, in light of the

district court's own conclusion that it never intended the injunction's use of "the general term Simulink" to reach pre-1996 versions (A27916), it could not be argued that MathWorks "receive[d] fair and precisely drawn notice of what the injunction actually prohibits" to warrant "the potent weapon of judicial contempt power" here. 776 F.2d at 1526 (quoting *Granny Goose Foods, Inc. v. Bhd. of Teamsters*, 415 U.S. 423, 444 (1974)). Moreover, the "unreasonableness" of a broad or vague injunction "is alleviated because of the universal rule . . . that contempt proceedings . . . are available only with respect to devices previously *admitted or adjudged to infringe*, and to other devices which are no more than colorably different therefrom and which clearly are infringements of the patent." *Id.* (emphasis added). As the record establishes and the district court made extremely clear, the devices adjudged to infringe and included within the injunction were post-1996, "live" versions of Simulink; pre-1996 versions of Simulink were not within the letter or spirit of the injunction, as the district judge who drew up that injunction expressly found. Accordingly, the generality of the injunction's language cannot possibly justify a contempt proceeding.

MathWorks' Rule 36 answer lends National no more support (NIB 18–19): That discovery response merely stated MathWorks' position that *none* of its products infringed the patents-in-suit, *regardless of the version*. (A27773) Indeed, MathWorks' answer, which was submitted in May 2002 several months before

trial, does nothing to minimize or change *National's* position—which was formulated at a later date but nevertheless pre-trial, and repeated throughout the trial—that infringement began with the introduction of “liveness” into version 2.0.

Moreover, MathWorks objected to the Rule 36 request on the basis that it “suggests that National is not required to prove at trial that *each version* of its Simulink product and any other accused product infringes the patents-in-suit . . . [or] that National can recover damages or obtain injunctive relief with respect to any accused product by relying upon a finding of infringement of a *single version* of Simulink or any other accused product.” (*Id.* (emphasis added)) These objections specifically address and refute National’s new theory on appeal that the infringement verdicts and injunction were directed to pre-1996, as well as post-1996, versions of Simulink, and also refute National’s assertion that MathWorks somehow admitted that all versions were adjudicated. It was simply was not so.

Finally, contrary to National’s transparent and unwarranted attempt to engender sympathy for its new “res judicata” arguments, this case does not raise “unique” or “important policy questions concerning the enforceability of judgments in patent cases” or “whether a defendant can avoid an injunction by simply ‘back-designing’ its product” without any “innovation.” (NIB 2, 14–15) Far from raising these or other concerns, MathWorks’ “resurrect[ion of] elements of pre-existing products” (NIB 14)—elements that National, the patentee, agreed

avoided infringement— fully complies with the spirit and letter of patent law because the re-implemented elements design around the claims of a patent. *See KSM*, 776 F.2d at 1526. National cites no authority for its absurd proposition that an infringer should not be able to revert to earlier, noninfringing products to avoid future infringement, and for good reason: The patent system does not contemplate such a rule. *See, e.g., Slimfold Mfg. Co. v. Kinkead Indus., Inc.*, 932 F.2d 1453, 1457 (Fed. Cir. 1991) (“Designing around patents is, in fact, one of the ways in which the patent system works to the advantage of the public in promoting progress in the useful arts, its constitutional purpose.”); *KSM*, 776 F.2d at 1526 (“An enjoined party is entitled to design around the claims of a patent without the threat of contempt proceedings with respect to every modified device.”). A party’s implementation of noninfringing behavior—whether by returning to the behavior of earlier, noninfringing products or otherwise designing around the patents-in-suit—is entirely consistent with the patent system and its interest in competition in the marketplace.

To the extent that this case presents “important policy questions,” those questions involve how best to prevent plaintiffs like National from utilizing the *in terrorem* effect of meritless contempt proceedings against competitors and their customers, from engaging in obvious about-faces regarding what was previously adjudicated and included within the injunction, and from using spurious and

waived arguments on appeal in order to maintain uncertainty in the marketplace while the appellate process works. Even the “just damages” and “double costs” of Fed. R. App. P. 38 may not be enough to deter such anticompetitive activity in future cases, given the potential for improper competitive advantage.

**IV. NATIONAL IS JUDICIALLY AND EQUITABLY ESTOPPED FROM NOW TRYING TO WALK AWAY FROM ITS “LIVENESS” ARGUMENTS, WHICH IT USED TO PREVAIL AT THE PREVIOUS TRIAL**

Because National attempts in its contempt challenges to walk away from its earlier “liveness” arguments, which National represented unequivocally and which National utilized to win at the previous trial, MathWorks raised the defenses of judicial and equitable estoppel in its briefs below. By reversing its position, National seeks to “play[] fast and loose with the courts.” *New Hampshire v. Maine*, 532 U.S. 742, 750 (2001) (internal quotation marks and citation omitted).

The Supreme Court has specifically condemned such about-face conduct:

[W]here a party assumes a certain position in a legal proceeding, and succeeds in maintaining that position, he may not thereafter, simply because his interests have changed, assume a contrary position, especially if it be to the prejudice of the party who has acquiesced in the position formerly taken by him.

*Id.* at 749; *see also Browning Mfg. v. Mims (In re Coastal Plains, Inc.)*, 179 F.3d 197, 206 (5th Cir. 1999). Judicial estoppel thus ensures that “a party cannot advance one argument and then, for convenience or gamesmanship after that

argument has served its purpose, advance a different and inconsistent argument,” *Hall v. GE Plastic Pac. PTE Ltd.*, 327 F.3d 391, 397 (5th Cir. 2003), and equitable estoppel ensures that a party does not mislead another party to its prejudice, *see A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1028–29 (Fed. Cir. 1992) (in banc).

Briefly, the facts relevant to MathWorks’ estoppel arguments include the following:

- National repeatedly represented throughout the infringement proceedings that the patents’ “input variable-icon” and “front panel” claim limitations require “live” inputs, and that Simulink version 1.3 did not infringe because it did not have “live” inputs. (A27134, A27160–61, A27164–65, A27488–90, A27493–94, A27497–98, A27513–15, A27526–27, A27531–33, A27537–39, A27547, A27830, A28657)
- National made these representations to argue successfully against MathWorks’ laches and equitable estoppel arguments, to distinguish the prior art, and to ultimately prevail on its claims of infringement and its request for higher damages. (A6034, A1.1–3, A22–30)
- National’s repeated statements about “live” inputs led MathWorks to reasonably conclude that National would not assert its patents against products that pause for inputs, and MathWorks redesigned Simulink in reliance on National’s statements, re-implementing in version 6.1 the pause behavior of pre-1996 versions that National admitted avoided infringement.
- In its contempt allegations, National *now* claims that the “input variable-icon” and “front panel” claim limitations do not require “live” inputs, and that the pause behavior re-implemented in version 6.1 is an “immaterial” modification.

- MathWorks would be materially prejudiced if National were permitted to proceed with its contempt allegations based on its new position that the patent claims do not require “live” inputs, because MathWorks has invested substantial resources into designing Simulink version 6.1 consistent with National’s prior representations, and MathWorks would be harmed in the marketplace if it could not continue to manufacture and sell version 6.1.

Applying either judicial or equitable estoppel, these facts bar National’s current position that the patent claims do not require “liveness.”

Applying judicial estoppel, National is bound to its prior position that all of the claims require “live” inputs, because the two elements of judicial estoppel have been met: (1) National has taken inconsistent positions—indeed, a “black to white reversal of position,” *Jackson Jordan, Inc. v. Plasser Am. Corp.*, 747 F.2d 1567, 1579 (Fed. Cir. 1984)—about whether the claims of the patents-in-suit require “liveness”; and (2) National’s earlier position, that “liveness” is required, succeeded at summary judgment of laches and equitable estoppel, on the validity of National’s patents by distinguishing National’s “live” products from the prior art, and on issues of infringement and damages. *See New Hampshire*, 532 U.S. at 750–51; *In re Coastal Plains*, 179 F.3d at 206 (Judicial acceptance may occur “either as a preliminary matter or as part of a final disposition.”); *Hall*, 327 F.3d at 399 (Judicial acceptance is satisfied “whenever a party makes an argument ‘with the explicit intent to induce the district court’s reliance.’” (quoting *Hidden Oaks Ltd. v. City of Austin*, 138 F.3d 1036, 1047 (5th Cir. 1998))).

Applying equitable estoppel, National is bound to its position that all of the claims require “live” inputs, because the three elements of equitable estoppel have been met: (1) National’s statements about “live” inputs led MathWorks to reasonably conclude that National would not assert its patents against products that pause for inputs; (2) in redesigning the Simulink software, MathWorks substantially relied on National’s misleading statements; and (3) MathWorks would be materially prejudiced if National were permitted to proceed with its new position on “liveness” asserted in its contempt allegations.<sup>8</sup> *See Aukerman*, 960 F.2d at 1028.

In anticipating MathWorks’ estoppel arguments before this Court, National makes several erroneous assertions that do not limit MathWorks’ estoppel arguments. For instance, contrary to National’s claim for which it inappropriately seizes on a general comment rendered during the hearing on its contempt motion,

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<sup>8</sup> In an attempt to refute the prejudice to MathWorks, National continues to use trial testimony by Mr. Ciolfi out of context. (NIB 66-67) At trial, Mr. Ciolfi was asked how difficult it would have been *in 1996*, after MathWorks released version 2.0, to revert back to the pause behavior of version 1.3; to that question, Mr. Ciolfi answered, “One week including testing and documentation.” (A4048) National’s argument ignores the fact that MathWorks restored the pause behavior not in 1996, but in 2004, *eight years and four major versions later*, and to a much larger, more complex, and widely used product family. The real point, however, is not how long it took MathWorks to make the product change, but rather the prejudice that would be suffered by MathWorks if National were now allowed to change its position.



and attempts to elevate that comment into a holding (NIB 8, 44–45), the district court did not rule on MathWorks’ judicial and equitable estoppel arguments.

Rather, the court put those issues aside and based its ruling on a finding that the modified product was more than colorably different than the products found to infringe, and that there were substantial open issues with respect to infringement that were better treated in a plenary infringement case than in a summary contempt proceeding. (A1, A27920) Accordingly, MathWorks’ estoppel arguments present issues of law that appropriately serve as alternative grounds for affirmance, and this Court’s consideration of the estoppel arguments is not confined to an abuse-of-discretion review. *See Datascope Corp. v. SMEC, Inc.*, 879 F.2d 820, 822 n.1 (Fed. Cir. 1989) (“Appellees always have the right to assert alternative grounds for affirming the judgment that are supported by the record.”). But even if the district court had considered and rejected MathWorks’ estoppel arguments, such a decision would be an erroneous application of the law governing estoppel, which would itself constitute an abuse of discretion. *See In re Coastal Plains*, 179 F.3d at 205; *Aukerman*, 960 F.2d at 1028, 1039.

National also errs in suggesting that MathWorks’ judicial estoppel argument collaterally attacks the judgment in the infringement case and seeks the “sanction” of limiting National’s recovery in the infringement case, and therefore has been waived. (NIB 58) Rather than “attacking” the injunction, MathWorks’ defense is

a straightforward application of judicial estoppel, because the premise of the injunction—*i.e.*, National’s position on “liveness,” repeatedly asserted in its successful infringement trial—is fundamentally inconsistent with National’s current position that the patent claims do not require “live” inputs. Accordingly, National’s “waiver” argument is unsupported.

National further errs in contending that the estoppel defenses apply only to the pause modification in normal and external modes. (NIB 8, 45) Because neither of the new features challenged by National in its contempt application—the external-time option and Model Explorer—reintroduces “liveness” (an element that National previously maintained was required for infringement), judicial and equitable estoppel *a fortiori* apply against those features as well.

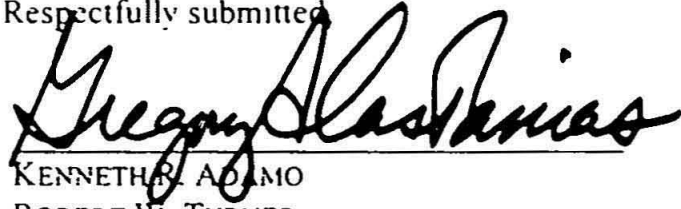
In short, the doctrines of judicial and equitable estoppel serve as independent and alternative grounds for affirming the denial of National’s contempt motion.

### **CONCLUSION**

For these reasons, the district court’s decision denying National Instruments’ Expedited Motion for an Order Holding MathWorks in Contempt of This Court’s Permanent Injunction and Granting Appropriate Relief should be affirmed.

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Respectfully submitted



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