

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

3G LICENSING, S.A., KONINKLIJKE)
KPN N.V., and ORANGE S.A.,)
)
Plaintiffs,)

v.)

C.A. No. 17-83-LPS

HTC CORPORATION and)
HTC AMERICA INC.,)
)
Defendants.)

3G LICENSING, S.A., KONINKLIJKE)
KPN N.V., and ORANGE S.A.,)
)
Plaintiffs,)

v.)

C.A. No. 17-84-LPS

LENOVO GROUP LTD., LENOVO HOLDING)
CO., INC., LENOVO (UNITED STATES))
INC., and MOTOROLA MOBILITY, LLC,)
)
Defendants.)

3G LICENSING, S.A., KONINKLIJKE)
KPN N.V., and ORANGE S.A.,)
)
Plaintiffs,)

v.)

C.A. No. 17-85-LPS

LG ELECTRONICS INC., LG)
ELECTRONICS U.S.A, INC. and LG)
ELECTRONICS MOBILECOMM U.S.A., INC.,)
)
Defendants.)

ALIGN TECHNOLOGY, INC.,)
)
 Plaintiff,)
)
 v.)
)
 3SHAPE A/S and 3SHAPE INC.,)
)
 Defendants.)

C.A. No. 17-1646-LPS

ALIGN TECHNOLOGY, INC.,)
)
 Plaintiff,)
)
 v.)
)
 3SHAPE A/S and 3SHAPE INC.,)
)
 Defendants.)

C.A. No. 17-1647-LPS

ALIGN TECHNOLOGY, INC.,)
)
 Plaintiff,)
)
 v.)
)
 3SHAPE A/S, 3SHAPE TRIOS A/S, and)
 3SHAPE INC.,)
)
 Defendants.)

C.A. No. 18-1949-LPS-CJB

DIGI PORTAL, LLC,)
)
 Plaintiff,)
)
 v.)
)
 QUOTIENT TECHNOLOGY INC.,)
)
 Defendant.)

C.A. No. 18-1485-LPS-CJB

LOCATION BASED SERVICES, LLC,)	
)	
Plaintiff,)	
)	
v.)	C.A. No. 18-1587-LPS-CJB
)	
GOOGLE LLC,)	
)	
Defendants.)	
_____)	

MEMORANDUM ORDER

At Wilmington this **5th** day of **July, 2019**:

The Court having heard oral argument in all of the above-listed cases on June 18, 2019,¹ **IT IS HEREBY ORDERED** that:

1. Quotient Technology, Inc.’s motion to dismiss (C.A. No. 18-1485 D.I. 11) is **DENIED**.

2. Align Technology, Inc.’s motions to strike (C.A. No. 17-1646 D.I. 105; C.A. No. 17-1647, D.I. 91) are **DENIED**.

3. 3Shape A/S et al.’s motions to dismiss (C.A. No. 17-1646 D.I. 102; C.A. No. 17-1647 D.I. 88) are **GRANTED**.

4. 3Shape A/S et al.’s motion to dismiss (C.A. No. 18-1949 D.I. 11) remains pending, although the Court announced it will deny the motion at least with respect to Count I (relating to the ’420 Patent).

5. Defendants HTC Corp., Lenovo Group Ltd., and LG Electronics Inc.’s motions for judgment on the pleadings (C.A. 17-83 D.I. 270; C.A. 17-84 D.I. 247; C.A. 17-85 D.I. 243) are **DENIED**.

¹ Judge Stark and Magistrate Judge Burke jointly presided throughout the argument.

6. Google, LLC's motion to dismiss (C.A. No. 18-1587 D.I. 7) is **DENIED IN PART** (with respect to the '073, '027, '729 and '691 Patents) and **GRANTED IN PART** (with respect to the '708 Patent).

7. Location Based Services LLC's motion to amend its complaint (C.A. No. 18-1587 D.I. 38) is **DENIED**.

All of the foregoing motions were argued at the June 18 hearing and the rulings provided above were all announced from the bench at the conclusion of the hearing, as follows:

. . . As you will imagine, because there were so many motions [argued], I do have quite a bit to say, so here we go with that.

First, in terms of the legal standards, I don't think anything was in dispute, but for purposes of the record I am adopting incorporating by reference my September 2018 decision in the Align cases, the 17-1646 and 17-1647.^[2] So what I think of the Rule 12(b)(6) standard and Section 101 law is set out there; and I'm not going to read it into the record but I do hereby adopt it by reference. Let me discuss the cases that were argued today in the order they were argued.

First was the *Digi Portal* case.^[3] That was the first case argued this morning. In the *Digi Portal* case, the defendant Quotient Technology moved to dismiss the complaint under Rule 12(b)(6) on the basis of Section 101.

Applying the law as I understand it, and having carefully reviewed the entire record and heard oral argument -- and I should just sa[y] I have carefully reviewed the entire record in all these cases and, of course, heard oral argument in all these cases so I may not repeat that, but we did go through that very same process for all the cases -- but having done so in the *Digi Portal* case, I find that the defendant has not shown that the '854 patent^[4] claims ineligible subject matter so I am denying defendant's motion in the *Digi Portal* case.

² See C.A. No. 17-1646 D.I. 64 at 3-9.

³ C.A. No. 18-1485-LPS-CJB.

⁴ U.S. Patent No. 8,352,854.

Quotient argues that claim 1 is representative. Because, as I will explain, I find that Quotient has failed to meet its burden to show that claim 1 is not patent eligible and because Quotient's position is that claim 1 is representative of all asserted claims, I need only analyze claim 1. There is no basis to find any other claim directed to non-patentable subject matter given my findings with respect to claim 1's patentability.

At Step 1 of *Alice*,⁵ I find that defendant oversimplified the abstract idea. The claim is directed to more than just providing targeted information, including advertising to a user.

Claim 1 recites a new way of generating customized web pages to improve the efficiency and scalability of delivering them. The patent specification further explains that this implementation is intend[ed] to resolve technological problems in the prior art, including long wait times to load pages in browsers and clog[ged] networks due to continuous streaming and large amounts of local storage that quickly becomes out of date.

While it may be possible that claim 1 could be accurately characterized as directed to some abstract idea, all I need to decide today is that the claim is not directed to the abstract idea articulated by defendant.

Defendant's characterization of the claim is not correct. My denial of defendant's motion is without prejudice, so depending on how the record develops, defendant may have another opportunity to try to meet its burden at Step 1.

Turning to Step 2, defendant has failed to show by clear and convincing evidence that claim 1 lacks an inventive concept. To the contrary, based on the record as it currently exists and taking all well pled facts as true, the claim at least captures the inventive concept of storing the template program in at least two locations and . . . determining from which locations to retrieve the template based on the frequency of the user request for the customized page. These inventive concepts are stated with specificity in the second element of the claimed method. At least one exemplary embodiment is discussed in the specification at Columns 4 to 5 in reference to Figures 2 and 4.

While it is true that "merely adding computer functionality to increase the speed or efficiency of a process does not confer patent eligibility," and that is a quote from the Federal Circuit's decision at *Intellectual Ventures v Capital One Bank*, 792 F.3d at

⁵ *Alice Corp. Pty. Ltd. v. CLS Bank Int'l. et al.*, 573 U.S. 208, 134 S. Ct. 2347 (2014).

page 1369,^{6]} while that is true, the Court is not persuaded that this is what is going on here. Rather, the invention is changing the computer functionality to improve the efficiency of the technological process that was already using a computer. While defendant points to another patent in the prior art, the '430 patent,^{7]} purportedly to demonstrate that retrieving customized pages from a cache is conventional, . . . defendant's argument only raises a potential factual dispute that I am unable to resolve at this stage.

That was all I had to say on the *Digi Portal* case where, again, the motion is denied. I will now turn to the *Align v 3Shape* cases. First, the [20]17 cases, 17-1647 and 17-1646.

The defendants here, 3Shape A/S, 3Shape Inc., and 3Shape TRIOS who I may collectively refer to as "3Shape," have moved to dismiss the complaint filed by Align Technology Inc., "Align" for failure to state a claim under Rule 12(b)(6) on the basis of Section 101.

Before I can address the motions to dismiss, I must address Align's motion to strike the 12(b)(6) motion based on Rule 12(g)(2).

Align argues that two of the three defendants previously filed a 12(b)(6) motion to dismiss the original complaint and to invalidate all the claims on the basis of Section 101 only to abandon that broad position and voluntarily agree to limit their challenge only to claim 1 of each patent.

The Court in its September 7th decision^{8]} invalidated claim 1 of both patents under Section 101. However, Align thereafter filed an amended complaint accusing for the first time the third defendant, 3Shape TRIOS of infringement.

I have decided to deny the motion to strike. The new defendant, 3Shape TRIOS is entitled to file its own Rule 12 motion in each case. The pending motions are 3Shape TRIOS's first opportunity to file Rule 12 motions. Align has not cited any authority for its contention that a new defendant[,] even one related to or associated with an original defendant[,] is somehow bound to the earlier motions practice to which it was not a party and therefore should be precluded from filing its own motion.

⁶ *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015).

⁷ U.S. Patent No. 5,740,430.

⁸ C.A. No. 17-1646 D.I. 64-65; C.A. No. 17-1647 D.I. 62-63.

Now, I don't expect and I certainly don't intend to invite serial Rule 12 motions. That would be improper and a violation of the rules. It would also be highly disrespectful of the Court's overstressed and limited judicial resources. Here, however, for whatever reason, the plaintiff voluntarily chose to file an amended complaint against a new defendant. That triggered a right in the new defendant to file a Rule 12 motion. In other words, Align opened the door to these new motions and the Court is not going to deprive the new defendant of its opportunity under Rule 12 to move to dismiss.

Turning to the merits of the motions to dismiss. First, in the 17-1646 motion, the motion is granted with respect to the '065 patent.^[9]

For Step 1, Align states that claim 7 is representative but does not say how claim 7 is distinguishable from the already invalid claim 1. In the Court's view, claims 1 and 7 are nearly identical in substance. There are some nondispositive differences to the preamble. Thus, for the reasons stated in the Court's September 7th decision which again I will incorporate hereby by reference, I find that all of the asserted claims of the '065 patent are directed to the abstract concept of modifying a finish line of a dental prosthesis.

While Align argues that the '065 patent teaches a specific method for updating a finish line using newly acquired second finish line data, the claim is not specific about that process. It does not, for instance, provide a particular method for automatically generating a finishing line or a specific process for incorporating a technician or a dentist[']s] manual adjustments. Rather, claim 7 is directed at a general computerized process that previously had been done manually, creating a first finishing line that may be manually modified. The use of a computer is distinguishable from the manual process only insofar as the computer reduces the back and forth between technicians or dentists when adjusting the finish line. The ability to make changes to the computer generated finish line does not make the claim non-abstract. It simply allows the technician or dentist to make changes faster.

Although claim 7 is representative, I also find that none of the other asserted claims offers anything to bring them out of the realm of abstraction as they all essentially recite aspects of the abstract idea such as modifying the finish line, drawing it at the

⁹ U.S. Patent No. 7,112,065.

[apical] limit, drawing the finishing line continuously or through a series of dots and so forth.

I disagree with Align's contention that claim construction is required in this case before the Court can make its decision on Section 101. The motion to dismiss was filed two months before the Court held a claim construction hearing but Align did not raise the issue of claim construction until its letter briefing for this hearing which was just last month. In any event, even adopting plaintiff's proposed construction for second finish line data would not [change] the outcome here. The proposed construction merely [e]ncapsulates the view that the second finish line data is different from the first finish line data or that a change has been made between the two iterations just as the line changes when it is manually modified.

Align's attempts to liken this case to *Data Engine*¹⁰ are also unpersuasive. In *Data Engine*, the invention of a tabbed layout to represent a three-dimensional spreadsheet improved the functioning of the computer itself. Here, while Align may in fact have invented an improvement over the prior art finishing line system, the claims do not capture those specific improvements.

At Step 2 of *Alice*, plaintiff argues the asserted claims are directed to a specific technique for updating a virtual finish line by providing a visual display of the original finish line such that the user can intuitively draw a second line to obtain a new finish line, to obtain new finish line data that is used to update the original inaccurate data. But as the Court stated in the September 7th decision, all of the purported improvements by Align are the result of using a generic computer[;] but performing an abstract concept on a generic computer is not an inventive concept.

Here, the purported inventive concept of saving time, because the dentist can renew and refine the model on the spot, is merely the benefit of the dentist being able to place the finish line on a 3D motion model by virtue of its transmission via a computer and computer network instead of the technician having to send a dentist a physical model to mark. These words equally apply to all asserted claims here.

Even assuming the Court has discretion to consider Align's declaration, the Court would only consider it for purposes of assessing whether an amended complaint, one that would incorporate the substance of the declaration[,] would be futile. Having considered the declaration for that limited purpose, the

¹⁰ *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018).

Court concludes that such an amended complaint would be futile. The declaration did not materially change the analysis. Therefore, defendant's motion to dismiss the claims relating to the '065 patent is granted.

Let me now turn to the '850 patent^[11] which is asserted in the 17-1647, *Align v 3Shape*[] action. This motion is granted.

Here, I find that at *Alice* Step 1, all of the asserted claims are directed to an abstract idea. The differences between already invalid claim 1 and asserted claim 20 are minimal. Claim 1 is a method claim reciting certain steps, and claim 20 is an apparatus claim directed to a generic computer performing those same steps.

As the Court previously stated with regards to claim 1, the invention is directed to the abstract concept of describing an orthodontic treatment plan. And . . . even though an orthodontist could not show a patient her mental model, she could express that mental model of the treatment plan to the patient using, for instance, photographs, physical models or drawings.

Align now argues that claim 20 of the '850 patent requires predetermining a treatment path for each tooth which was never done before Align's Clear Aligner technique. The Court finds, however, that the claim does not embody this alleged invention. Neither the specification, nor the claims discuss how tooth movement is calculated or how treatment paths are developed via software. Rather, the claims discuss in broad terms the creation of a virtual 3D model of teeth to create a virtual treatment plan.

Further, while plaintiff [c]ites *Core Wireless*^[12] as the closest case supporting its position, the Court has already rejected this contention in its September 7th decision.

The dependent claims are also directed to the same abstract idea. The dependent claims described aspects of the system and process[,] such as the specific views or angles of the 3D model, renderings of the model or renderings of the model along the treatment path. None of these add any sort of technical feature that improves computer functionality and neither do[] any of the other dependent claims.

Turning to *Alice* Step 2. None of the asserted claims provide an inventive concept. The Court has already determined that "the benefit of allowing an orthodontist to more easily explain

¹¹ U.S. Patent No. 6,227,850.

¹² *Core Wireless Licensing S.A.R.L., v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. 2018).

[a] treatment plan to a patient via a 3D model[, while] an improvement [over] explaining . . . the plan verbally[,] is not a technological improvement that supplies an inventive concept.”^[13] Furthermore, “the ’850 patent does not disclose a new method by which a 3D model of teeth could be made[,] or the method by which a 3D model can be repositioned virtually to display a different angle.”^[14]

Finally, the Court is not persuaded that claim construction is required or that considering the declarations for the limited purposes for which it would be proper makes a material difference.

That is all I have to say on the 2017 *Align* cases.

The next case that was argued was the 2018 *Align* case . . . 18-1949. The motion there is directed to two asserted patents, the ’634 patent^[15] and the ’420 patent.^[16]

With respect to the ’634 patent, I need to take the motion under advisement. My present inclination, and it is a fairly strong one but not one I’m ready to put in an order, is that at least some of the claims will survive the motion. It may be that all of the claims survive the motion but I’m not prepared today to delineate between those claims that survive the motion and those that may not. So I will have to do some further work on the ’634 patent.

With respect to the ’420 patent, which is the other patent that was at issue in the 2018 *Align* case, the parties have a dispute there as to whether certain claims are representative but the Court need not decide that issue as the motion is denied as to all claims of the ’420 patent regardless of the outcome of the representativeness question.

At Step 1, it is unclear at the moment to me whether the claims are all directed to an abstract idea but even assuming defendant has met its burden on Step 1, it has failed to meet its burden at Step 2. The specification discloses that the curve or plane is applied to the final desired tooth positions. There is at minimum a question of fact as to whether the use of the Spee curve or Andrew[’]s plane to determine initial graphic placement is

¹³ C.A. 17-1647 D.I. 63 at 31.

¹⁴ *Id.* at 32.

¹⁵ U.S. Patent No. 7,357,634.

¹⁶ U.S. Patent No. 9,844,420.

routine and conventional. For that reason, defendant's motion is denied.

That's all I have to say about the [*3Shape*]/*Align* cases

. . . I have next the three related *3G* cases: *3G* versus HTC, versus Lenovo and versus LG, 17-83, 17-84 and 17-85.

I begin with the '564 patent.^[17] With respect to the '564 patent, the motion is denied.

Defendant has failed to meet its burden on Step 1. The patent -- that is the '564 patent now -- sets forth a specific problem to be solved: That prior art devices face drawbacks in exploiting the maximum capacity of the wireless transmission system, and that current solutions require complex and otherwise limited systems.

The patent then sets forth a specific way of solving this capacity problem to precode distinct signals in a matrix in a particular way and to have each antenna transmit and/or receive each precoded signal simultaneously. According to the patent, this approach differs sharply from the cyclical sending proposed by the prior art which induced high complexity at reception, and has the advantage that the invention can be used to exploit the maximum capacity of the MIMO, multi-input multi-output[,] channel given that it does not use space time codes and maximum space time diverse through the linear precoding. Further, the size of the precoding matrix is not limited to the number of antennas as it was in the prior art.

The disputed claims do more than just ma[th]. For example, claim 5 discloses a method for receiving wireless signals where each of a plurality of receiving antennas receives a signal and puts that signal in a column in a reception matrix which mirrors the original transmission matrix. The reception matrix is then multiplied against a de-precoding matrix, an inverse of the precoding matrix used prior to transmission to arrive at the estimated source matrix.

Although claim 5 focuses on the reception function and claims generic structure, such as M transmit antennas, P receiver antennas, several matrices and implicitly a processor to perform the calculations, the claims provide a specific application of math to a technical problem. That improves the functionality of the generic components.

¹⁷ U.S. Patent No. 7,933,564.

Therefore, I agree with plaintiff that the case that is most analogous here is *Thales*.^[18] Although [it is] not necessar[y] to reach Step 2, I further conclude under Step 2 there is at least a question of fact as to whether utilization of the plurality of antennas to receive and sort signal data in a reception matrix and then de-encode the matrix in the manner described was routine and conventional[,] which further precludes dismissing the claims at this time. That is, there is a factual dispute at minimum on those questions. There are at least three express[] statements in the specification that point out how, in the inventor's view, some of what is being disclosed is wholly novel and inventive; and these statements, while not dispositive, further support the Court's holding.

Turning next to the '091 patent.^[19] The motion with respect to this patent is also denied. The Court is persuaded by plaintiff that claim construction is necessary before the 101 disputes can be considered on the merits with respect to the '091 patent.

Plaintiff contends that initiate and initiating must be construed as occurring automatically. If automatically is somehow embodied in the claim, that may improve the functionality of the prior art[,] as it would appear to address the problem to be solved, automatically providing the most efficient communication under limited bandwidth situations. This claim construction dispute, however, has not been briefed and, of course, has not been decided.

Under the circumstances of this case, the Court does not fault the plaintiff for failing to present this claim construction dispute earlier[,] such as at the time the Court was construing claims. The Court excuses plaintiff's failure to do so because the parties' disagreement here only became clear after the claim construction process and particularly in connection with the briefing on the 101 motion, briefing which concluded only I think last week and certainly very recently.

Therefore, I am denying the motion to dismiss the '091 patent without prejudice to renew at summary judgment. If the motion is to be renewed, the parties will have to include in their summary judgment briefing some additional briefing on claim construction.

¹⁸ *Thales Visionix, Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017).

¹⁹ U.S. Patent No. 7,995,091.

That's all I have to say on the 3G cases.

That leaves just the last case, LBS or Location Based Services versus Google. There are two sets of patents here, and also plaintiff's motion for leave to file an amended complaint.

I'll start with the first four patents, what I'm going to call the visual path patents: The '073,^[20] '027,^[21] '729,^[22] and '691^[23] patents.

For these four patents, I am denying the motion but I am doing so very reluctantly. And I want to explain the nature of my reluctance in denying the motion.

At Step 1 of *Alice*, I find that claim 1 of the '073 patent, which is representative, is directed to the abstract idea of providing a visual travel path using images.

Indeed, the patent specification states that the visual path enables a user of a mobile device to visualize the path for travel purposes. The defendants have met their burden at Step 1.

Turning to Step 2, it is fair to say that the specifications are at best for plaintiff highly problematic. The specifications do not discuss the prior art, do not discuss any problem in the prior art, do not discuss any solution to any problem and do not affirmatively indicate any inventive concept.

Plaintiff points to stitching and scrolling as purportedly inventive concepts, yet the patents say essentially nothing about how to do stitching or scrolling. Arguably, in fact, the depiction in Figure 3 and the related discussion in the specification supports a view that a person of ordinary skill in the art would have well understood just how routine and conventional these techniques were at the time of the patent. It could very well be that the patentee did not bother to provide any further explanation because the patentee knew that these techniques were not inventive. However, all of that would at this point be speculation.

Making today's decision even more difficult is plaintiff's proposed amended complaint. I do appreciate how plaintiff handled this matter procedurally. They were advised of a purported deficiency in their patent, and they got an expert and

²⁰ U.S. Patent No. 7,734,073.

²¹ U.S. Patent No. 8,805,027.

²² U.S. Patent No. 9,286,729.

²³ U.S. Patent No. 8,207,691.

they tried to fix it. That is a good way of handling this type of problem, and it is far better than just showing up at the hearing and suddenly announcing we would like to amend our complaint and we hired an expert and here is what we could do. It is far better to do it, and so I appreciate that plaintiff did that.

The problem here is that what I got from the expert is almost entirely unhelpful. It is wholly conclusory and really doesn't strengthen the plaintiff's case on the merits. Arguably, it only raises further doubts. So this is a tricky situation.

But I am, as I said, I am denying the motion. We're at Rule 12. While the suspicions and doubts I had with these four patents have truly only been heightened through this process, I think it would be wrong under Rule 12 for me to act on my suspicion and speculation when instead I think what the record is telling me is that there is a factual dispute at Step 2 and plaintiff will have a chance, as the cases proceed, to see if they can prove the allegations that they have stated.

So at this stage, I feel I am required to deny defendant's motion with respect to the four patents. I am, however, also denying the motion to amend because I find that the declaration is wholly conclusory and doesn't help the plaintiff in any regard so the case will go forward on the original complaint.

Turning to the '708 patent,^[24] also referred to as the itinerary patent, I'll grant the motion to dismiss and deny the motion to amend with respect to this patent. The parties agree that at least claim 1 is representative. At Step 1, I find claim 1 of the '708 patent is directed to the abstract idea of providing and altering itineraries for a group of individuals. The itinerary[] patent specification does not discuss the prior art or any problem the patent purports to resolve. There is nothing at all technological about planning itinerary groups for groups of people and plaintiff fails to explain how the claim does anything [but add] computer functionality to this wholly nontechnical process.

Plaintiff's argument that the claims solve a problem with existing mobile navigation computer networks and they facilitate leading individual improved goals simultaneously is not supported in the intrinsic record.

As defendants argue, the claimed convention could be accomplished by a hotel concierge or tour guide, although less efficiently.

²⁴ U.S. Patent No. 7,729,708.

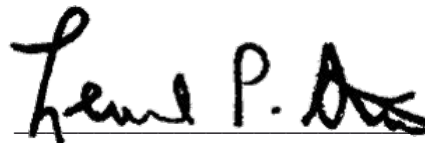
Turning to Step 2. While plaintiff argues the inventive concept is the root determination for real-time location for multiple mobile peer devices, the specification expressly provides the contrary, noting that “there are several appropriate negotiation network types for a mobile peer mesh network.”

And using a computer to cause a human process to happen in real-time is not a technical solution to computer functionality. As there is no technical problem in the prior art that the claimed method purports to resolve, I find there is no inventive concept.

Plaintiff contends that claims 12 and 23 are also representative, but I disagree. Claim 12 limits the type of goal which is not an inventive concept and does not impact the Section 101 analysis. Claim 23 has a limitation of downloading a map or directions which is also not inventive.

Given my findings, I’m not persuaded that there is anything in any of the other claims that need separate discussion. I’m also not persuaded that plaintiff’s proposed claim construction or proposed amended complaint could materially affect the analysis.

That is my ruling in the *LBS* case.

A handwritten signature in black ink, appearing to read "Leonard P. Stark". The signature is written in a cursive, somewhat stylized font. Below the signature is a horizontal line.

HONORABLE LEONARD P. STARK
UNITED STATES DISTRICT JUDGE