

**United States Court of Appeals  
for the Federal Circuit**

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**UNIVERSITY OF UTAH,**  
*Plaintiff-Appellee,*

**v.**

**MAX-PLANCK-GESELLSCHAFT ZUR  
FORDERUNG DER WISSENSCHAFTEN E.V., MAX-  
PLANCK-INNOVATION GMBH, WHITEHEAD  
INSTITUTE FOR BIOMEDICAL RESEARCH,  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY,  
AND ALNYLAM PHARMACEUTICALS, INC.,**  
*Defendants-Appellants,*

**AND**

**ROBERT L. CARET, JAMES R. JULIAN, JR.,  
DAVID J. GRAY, AND JAMES P. MCNAMARA,**  
*Defendants-Appellants.*

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2012-1540, -1541, -1661

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Appeals from the United States District Court for the  
District of Massachusetts in No. 11-CV-10484, Judge  
Patti B. Saris.

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Decided: August 19, 2013

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MARK S. CARLSON, Hagens Berman Sobol Shapiro, LLP, of Seattle, Washington, argued for plaintiff-appellee. With him on the brief was STEVE W. BERMAN.

DAVID I. GINDLER, Irell & Manella, LLP, of Los Angeles, California, argued for all defendants-appellants. With him on the brief were MORGAN CHU, and ALAN J. HEINRICH. Of counsel on the brief were SANDRA L. HABERNY, of Newport Beach, California; and THOMAS F. MAFFEI and SCOTT MCCONCHIE, Griesinger, Tighe & Maffei, L.L.P., of Boston, Massachusetts.

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Before MOORE, REYNA, and WALLACH, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* REYNA.

Dissenting opinion filed by *Circuit Judge* MOORE.

REYNA, *Circuit Judge*.

The University of Utah (“UUtah”) brought this lawsuit to correct inventorship of U.S. Patent Nos. 7,056,704 and 7,078,196 (the “Tuschl Patents”). Originally, UUtah named as defendants the assignees (“Assignees”) of the Tuschl Patents: Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V., Max-Planck-Innovation GmbH, Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology, and Alnylam Pharmaceuticals, Inc., (collectively, the “non-State Defendants”) and the University of Massachusetts (“UMass”).

UMass argued that, because the dispute was between two States, the Supreme Court had exclusive original jurisdiction. In response, UUtah amended its complaint, substituting four UMass officials (the “Named Officials”) in place of UMass. The Named Officials then moved to dismiss the case, arguing that UUtah’s claims were barred by sovereign immunity and that UUtah had failed to join UMass, which they claimed was an indispensable

party. The district court denied the motion, and the defendants appealed.

This case requires us to examine the issues of sovereign immunity and federal jurisdiction that arise when state universities are involved on both sides of an inventorship dispute. For the reasons that follow, we affirm.

#### BACKGROUND

The following facts come from UUtah's complaint which, for the purpose of evaluating the motion to dismiss, we take as true.

Dr. Brenda Bass is a professor of biochemistry at UUtah. Her research is focused on RNA biochemistry. In particular, Dr. Bass studies RNA interference ("RNAi"), a phenomenon in which RNA plays a role in silencing the expression of individual genes. Her employment agreement assigns to UUtah the rights to all inventions and discoveries she makes as a result of her employment or research, including the rights to any patents arising from her work.

Dr. Thomas Tuschl, a researcher employed by UMass, is also active in RNAi research. In the course of their work, Drs. Tuschl and Bass attended professional conferences at which they both presented papers on RNA and RNAi issues. Both researchers were familiar with each other's work. Dr. Tuschl eventually applied for and was granted the Tuschl Patents, which Dr. Bass claims "disclosed and claimed [her] conception." Dr. Bass is not a named inventor on either of the Tuschl Patents.

UUtah, as assignee of Dr. Bass's rights, believes that Dr. Bass is the sole or a joint inventor of the Tuschl Patents. UUtah asked Assignees to cooperate in petitioning the United States Patent and Trademark Office ("USPTO") to correct the inventorship of the Tuschl Patents by adding Dr. Bass as an inventor. Defendants, who do not believe that Dr. Bass is an inventor of the

Tuschl patents, declined that request. As a result, UUtah initiated this suit in district court, requesting the correction of the inventorship of the Tuschl Patents under 35 U.S.C. § 256 and asserting various state law claims against the non-State defendants.

The original and first amended complaints named as defendants each of the Assignees, including UMass. UMass moved to dismiss, arguing that because UUtah and UMass were both arms of the State, the dispute between them fell within the exclusive original jurisdiction of the Supreme Court. In response, UUtah amended its complaint, replacing UMass with four UMass officials: Robert L. Caret (President of UMass), James R. Julian (Executive Vice President and Chief Operating Officer of UMass), David J. Gray (Senior Vice President for Administration, Finance, & Technology and University Treasurer of UMass), and James P. McNamara (Executive Director, Office of Technology Management of UMass). UUtah stated that its intent in making this amendment was to avoid the Supreme Court's exclusive jurisdiction.

The Named Officials moved to dismiss, arguing that the case fell within the exclusive original jurisdiction of the Supreme Court and that UUtah's claims were barred by sovereign immunity. The district court rejected these arguments, concluding that relief under § 256 is "prospective in nature, and does not involve a retroactive remedy." Citing *Connecticut ex rel. Blumenthal v. Cahill*, 217 F.3d 93, 98 (2d Cir. 2000), the court ruled that the case did not fall within the exclusive original jurisdiction of the Supreme Court because UUtah had chosen to sue state officials, not the State itself. It also reasoned that correction of inventorship was not a core sovereign interest sufficient to make this a dispute between States. Accordingly, the district court concluded that it "ha[d] jurisdiction over the action against the UMass state officials under the *Ex parte Young* doctrine."

The Named Officials also argued that UUtah had failed to name UMass, which they claimed was an indispensable party. The district court rejected this argument as well, ruling that the suit could proceed without UMass. The court reasoned that neither UMass nor Defendants would be prejudiced by a judgment rendered in UMass's absence because UMass's interests would be adequately represented by the existing defendants, including the Named Officials. The court also found that the remedy—an order directing the USPTO to correct inventorship—would provide adequate relief whether or not UMass was joined.

Defendants appeal the denial of the motion to dismiss. This court has jurisdiction under 28 U.S.C. § 1295(a)(1) and the collateral order doctrine. *See Puerto Rico Aqueduct & Sewer Authority v. Metcalf & Eddy, Inc.*, 506 U.S. 139, 147 (1993) (holding that immediate appeal of the denial of a motion for dismissal based on sovereign immunity is permissible under the collateral order doctrine).

#### DISCUSSION

State universities frequently obtain assignments on patents invented by their faculties and staff, just as private corporations often obtain assignments on patents invented by their employees. Unlike a private corporate assignee or an individual inventor, a state university typically enjoys sovereign immunity. As a result, a state university generally may not be sued for infringement, nor may it be forced to defend against an action for declaratory judgment of invalidity or non-infringement. *See A123 Sys., Inc. v. Hydro-Quebec*, 626 F.3d 1213, 1220 (Fed. Cir. 2010). But States do not enjoy sovereign immunity from suits brought by other States. *Texas v. New Mexico*, 482 U.S. 124, 130 (1984). Similarly, States are free to sue citizens of other States without raising sovereign immunity issues.

This case requires us to examine the legal complexities that arise when state universities are on both sides of a patent dispute. Defendants present three issues for our consideration. First, they contend that the district court lacked jurisdiction because, under 28 U.S.C. § 1251(a), this case falls within the exclusive original jurisdiction of the Supreme Court. In procedural questions not unique to patent law, we review a dismissal for lack of subject matter jurisdiction according to the law of the regional circuit, which in this case is the First Circuit. See *Toxgon Corp. v. BNFL, Inc.*, 312 F.3d 1379, 1380 (Fed. Cir. 2002). The First Circuit reviews a motion to dismiss de novo, “taking as true the well-pleaded facts contained in the complaint and drawing all reasonable inferences therefrom in the plaintiff’s favor.” *Garrett v. Tandy Corp.*, 295 F.3d 94 (1st Cir. 2002).

Second, Defendants argue that, as an arm of the State of Massachusetts, UMass is entitled to Eleventh Amendment immunity. We have held that the question of Eleventh Amendment waiver is a matter of Federal Circuit law. *Regents of the Univ. of N.M. v. Knight*, 321 F.3d 1111, 1124 (Fed. Cir. 2003). “We review the district court’s decision on Eleventh Amendment immunity de novo.” *A123 Sys.*, 626 F.3d at 1219.

And, third, Defendants argue that UMass is an indispensable party and that the case should have been dismissed under Fed. R. Civ. P. 19(b). “Whether a party is indispensable under Rule 19(b) is a matter of regional circuit law.” *Dainippon Screen Mfg. Co. v. CFMT, Inc.*, 142 F.3d 1266, 1269 (Fed. Cir. 1998). The First Circuit reviews Rule 19 decisions for abuse of discretion. *Picciotto v. Continental Cas. Co.*, 512 F.3d 9, 14 (1st Cir. 2008). Having established the applicable standards of review in this appeal, we address each of these issues in turn.

## I. SUPREME COURT JURISDICTION

We begin with Defendants' argument that this case is a dispute between States and, as such, falls within the exclusive original jurisdiction of the Supreme Court. If Defendants are correct, both this court and the district court are without jurisdiction over the dispute, and we must dismiss the case. Because UMass is not a real party in interest under the Supreme Court's caselaw, we hold that this is not a conflict between States subject to the Court's exclusive original jurisdiction.

Article III, § 2, cl. 2 of the Constitution provides: "In all Cases . . . in which a State shall be Party, the [S]upreme Court shall have original Jurisdiction." When a State sues another State, the Court's jurisdiction is not only original, but exclusive. 28 U.S.C. § 1251(a) ("The Supreme Court shall have original and exclusive jurisdiction of all controversies between two or more States."). But when a State sues the *citizens* of another State, the Supreme Court's original jurisdiction is concurrent with the district courts. *See id.* § 1251(b)(3).

The Court has explained that both its exclusive and concurrent original jurisdiction is "obligatory only in appropriate cases." *Illinois v. City of Milwaukee, Wis.*, 406 U.S. 91, 93-94 (1972). Whether original jurisdiction is appropriate depends upon "the seriousness and dignity of the claim," whether the "named parties" have another forum "where appropriate relief may be had," and whether the case raises "serious and important" federalism concerns.<sup>1</sup> *Id.*; *Wyoming v. Oklahoma*, 502 U.S. 437, 451

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<sup>1</sup> The dissent suggests that these considerations only apply to whether the Court exercises its exclusive jurisdiction, not to whether it exists. Dissent at 4. In *Illinois*, however, the Court considered all these factors before finding that its exclusive jurisdiction did not exist, and that original jurisdiction resided in the district court.

(1992); *Mississippi v. Louisiana*, 506 U.S. 73, 77 (1992). Further, when deciding whether a case is “appropriate,” it is proper to look beyond the named parties and determine the real party in interest. *Illinois*, 406 U.S. at 93-94; *In re State of New York*, 256 U.S. 490, 500 (1921); *Ex Parte Ayers*, 123 U.S. 443, 487 (1887).

A State is the “real, substantial party in interest,” for purposes of the Supreme Court’s exclusive jurisdiction, if it is a “mandatory” or “indispensable” party such that the decree would operate directly against it and adequate relief cannot be granted without it. *Pennhurst State School & Hosp. v. Halderman*, 465 U.S. 89 (1984) (decree operated directly against the State when the district court ordered a state mental hospital closed, its prisoners moved, and a special master appointed to implement and monitor the court’s order); *see also Dugan v. Rank*, 372 U.S. 609, 620 (1963) (decree would enjoin federal officials such that they would be forced to act contrary to congressional mandate); *Cunningham v. Macon & Brunswick R. Co.*, 109 U.S. 446, 457 (1883) (Georgia was “indispensable” party because no relief could be granted without it); *but see Illinois*, 406 U.S. at 97 (State not “mandatory” party).

For example, a State is the real, substantial party in interest if the judgment sought would expend itself on the State’s treasury. *See, e.g., Land v. Dollar*, 330 U.S. 731, 738 (1947); *Ex parte Ayers*, 123 U.S. at 492 (1887); *Cunningham*, 109 U.S. at 455-456. Likewise, if an injunction against or compelling state administration is sought, the State is the real party in interest. *Pennhurst*, 465 U.S. at 106 (instructing a State how to conform to its own law

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*Illinois*, at 93-94, 97-98. Thus, the Court was not merely declining to exercise its *exclusive* jurisdiction because, if it had been, jurisdiction in the lower court would have been improper.



intrudes on state sovereignty); *Corey v. White*, 457 U.S. 85, 89 (1982) (discussing restraint of state action); *Hawaii v. Gordon*, 373 U.S. 57 (1962) (decree would intrude on sovereignty because it would require the disposition of property belonging to the United States) (per curiam).

On the other hand, a State with “some interest of hers [ ] more or less affected by the decision” but not directly affected by the court’s decree is not a real party in interest. *Cunningham*, 109 U.S. at 451, 452 (discussing, *inter alia*, when a State may join to assert a property right, but is not required to). For example, in *Illinois*, Illinois sought an abatement of a public nuisance allegedly caused by the city and county of Milwaukee polluting Lake Michigan. While Wisconsin’s interests would certainly have been indirectly affected by a decision abating the alleged pollution, the Court found that Wisconsin was not a “mandatory” party. *Illinois*, 406 U.S. at 97. Adequate relief could be granted without Wisconsin and the suit was allowed to go forward in district court against the named defendants, the city of Milwaukee and a Milwaukee County Sewage Commission. *Id.* at 97, 98; *see also Land*, 330 U.S. at 738 (U.S. Government is not a mandatory party if it is not needed to grant full relief).

UUtah, the plaintiff in this case, is an arm of the State.<sup>2</sup> *See Watson v. Univ. of Utah Med. Ctr.*, 75 F.3d 569, 574-75 (10th Cir. 1996). UUtah originally named UMass, which is also an arm of the State, *see Wong v. Univ. of Mass.*, 777 N.E.2d 161, 163 n.3 (Mass. 2002), as a defendant. When UMass responded by arguing that the

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<sup>2</sup> The “arm of the State” doctrine bestows Eleventh Amendment immunity on entities created by state governments that operate as instrumentalities of the State. *See Mt. Healthy City Sch. Dist. Bd. of Educ. v. Doyle*, 429 U.S. 274, 280 (1977). We assume, without deciding, that this doctrine is also relevant to the § 1251 inquiry.

lawsuit was a dispute between States falling within the Supreme Court's exclusive original jurisdiction, UUtah amended its complaint, replacing UMass with the Named Officials. As a result, there are no State defendants named in the second amended complaint; Defendants are all citizens of a State other than Utah. It follows that this action, at least on its face, is a proceeding brought by a State against the citizens of another State as described in § 1251(b)(3) (and not a controversy between States under § 1251(a)). If this is true, the Supreme Court does not have exclusive jurisdiction.

The district court, relying on *Cahill*, concluded that a State is generally free to “choose between naming a State as the defendant and suing in the Supreme Court or naming another proper defendant and suing in a district court.” *Cahill*, 217 F.3d at 98. Defendants nevertheless contend that this case falls within the exclusive original jurisdiction of the Supreme Court. Defendants assert that because UUtah seeks the property of UMass, UMass is the real party in interest, and that UUtah may not “plead around” the Supreme Court's exclusive original jurisdiction over disputes between States.

Thus, we must determine if UMass is a real party in interest for purposes of the Supreme Court's exclusive jurisdiction under § 1251(a). The First Circuit has not yet addressed this issue. As noted, the district court based its decision on *Cahill*, a Second Circuit case that squarely addressed whether § 1251(a) deprives the district courts of jurisdiction over actions brought by one State against officials of another.

At issue in *Cahill* was a New York law allowing resident permit holders to trap lobsters in a certain area but prohibiting non-resident permit holders from doing the same. *Id.* at 96. The State of Connecticut, acting as *parens patriae*, brought suit in federal district court to enjoin New York state officials from enforcing the law. *Id.*

Although Connecticut had sued New York officials, not the State of New York, the district court “ruled that the State of New York was the sole real defendant-party in interest and dismissed the suit for lack of subject matter jurisdiction because the suit was a ‘controvers[y] between two or more States’ within the Supreme Court’s exclusive original jurisdiction.” *Id.*

A divided panel of the Second Circuit reversed. The majority concluded that “a plaintiff-State may decide whether or not to name another State as a defendant, and to enjoy (or suffer) the jurisdictional consequences of that decision.” *Id.* at 98. The majority reviewed the Supreme Court’s caselaw and concluded that a State is the real party in interest when “(1) the alleged injury was caused by actions specifically authorized by State law, and (2) the suit implicates the State’s core sovereign interests.” *Id.* at 99. The majority derived its core sovereign interests inquiry from the Supreme Court’s focus on “the seriousness and dignity of the claim” and cases that “implicate serious and important concerns of federalism.” *Id.* (quoting *Mississippi*, 506 U.S. at 77 and *Wyoming*, 502 U.S. at 451. The majority provided several examples of core sovereign interests, including boundary disputes, disputes over water rights, and disputes over contracts between states. *See id.* at 100. A look to the Supreme Court’s caselaw identifies further examples. *See, e.g., Pennhurst*, 465 U.S. at 106 (instructing state officials how to conform their conduct to state law “conflicts directly with the principles of federalism.”). The majority concluded that Connecticut’s suit did not challenge New York’s core sovereign interests, but instead “challenge[d] as unconstitutional the *manner* in which New York has exercised its unchallenged power to regulate its waters.” *Id.* at 104. Accordingly, the majority concluded that jurisdiction was appropriate in the district court.

Circuit Judge Sotomayor dissented. In her view, the State of New York was the real party in interest. *Id.* at

107 (Sotomayor, J., dissenting) (“[W]hatever ‘considerable freedom’ the majority supposes a plaintiff-State possesses in [choosing defendants] is still constrained by the requirement that courts look beyond the form of the pleadings and determine who is the real party being sued.”). According to the dissent, “relief sought nominally against an officer is in fact against the sovereign if ‘the effect of the judgment would be to restrain the Government from acting, or to compel it to act.’” *Id.* at 106 (Sotomayor, J., dissenting) (citing *Pennhurst*, 465 U.S. 89, 101 & n.11; *Hawaii*, 373 U.S. at 58; and *Dugan*, 372 U.S. at 620). To Judge Sotomayor, there could be “no serious doubt” that although the action had been brought against state officials, it was an action by Connecticut against New York. *Id.* at 106.

The majority and dissent in *Cahill* focused on different aspects of Supreme Court caselaw when deciding whether to disregard a plaintiff-State’s decision to name state officials as defendants (under § 1251(b)(3)) and treat the suit instead as a controversy between States (under § 1251(a)). We need not predict the First Circuit’s focus because, overall, the Supreme Court’s caselaw does not require us to treat this case as a dispute between States.

First, UMass is not a real party in interest under the *Cahill* majority approach. The majority concluded that a State whose officers’ action is challenged must be considered the real party in interest where “(1) the alleged injury was caused by actions specifically authorized by State law, and (2) the suit implicates the State’s core sovereign interests.” *Cahill*, 217 F.3d at 99. Assuming *arguendo* that the first prong of this test is met, Defendants have not identified a core sovereign interest of Massachusetts in this case. The Named Officials are defendants only in counts 1-4, which seek correction of inventorship under § 256, and count 5, which seeks declaratory judgment that Dr. Bass is the sole or a joint

inventor of the Tuschl patents. Thus, with respect to UMass, only inventorship is at issue.

We hold that a State has no core sovereign interest in inventorship. The inventors of a patent are “the individual or, if a joint invention, the individuals collectively who invented or discovered the subject matter of the invention.” 35 U.S.C. § 100(f). It is axiomatic that inventors are the individuals that conceive of the invention:

Conception is the touchstone of inventorship, the completion of the mental part of invention. It is the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice. Conception is complete only when the idea is so clearly defined in the inventor’s mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation. [Conception] is a mental act . . . .

*Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1227-28 (Fed. Cir. 1994) (internal quotation marks and citations omitted). To perform this mental act, inventors must be natural persons and cannot be corporations or sovereigns. And because States cannot be inventors, it follows that inventorship is not a core sovereign interest of the States.

UMass and the dissent confuse the issue by repeatedly framing the dispute as one of ownership, not inventorship. Although “[q]uestions of patent ownership are distinct from questions of inventorship,” they are closely related: “[E]ach co-inventor presumptively owns a pro rata undivided interest in the entire patent, no matter what their respective contributions.” *Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1465 (Fed. Cir. 1998) (footnote omitted). But State ownership of patent rights is not akin to State ownership of water rights, natural

resources, or other property issues that “implicate serious and important concerns of federalism” and rise to the level of core sovereign interests. *Cahill*, 217 F.3d at 99. Accordingly, even if UMass and the dissent were correct that ownership was at issue in this case, that fact alone would not require us to consider UMass a real party in interest under the *Cahill* majority approach.

Second, UMass is not a real party in interest under the *Cahill* dissent’s approach. As noted, the dissent focused on the Supreme Court’s language from *Dugan*, concluding that “relief sought nominally against an officer is in fact against the sovereign if ‘*the effect of the judgment* would be to restrain the Government from acting, or to compel it to act.’” *Id.* at 106 (Sotomayor, J., dissenting) (emphasis added); *Dugan*, 372 U.S. at 620. A judgment ordering the Director of the USPTO to correct inventorship will not require or restrain UMass from acting. Neither UMass nor its officials are required to cooperate with UUtah in petitioning for the correction of inventorship under § 256(a). Indeed, § 256(b) exists to provide a means for correcting inventorship when a party does not consent to cooperate under § 256(a), but a decree under § 256(b) does not restrain the State, nor does it compel the State to act—rather, it may cause the Director of the USPTO to act. Thus, should UUtah prevail, the district court’s judgment would not directly restrain or compel UMass. *See Pennhurst*, 465 U.S. at 117.

A wider view of the Supreme Court cases addressing the real party in interest further supports this conclusion. UMass is not an “indispensable” or “mandatory” party because the district court is fully capable of granting the relief UUtah requests without UMass. *See Illinois*, 406 U.S. at 97-98; *Cunningham*, 109 U.S. at 451; *Ex parte Ayers*, 123 U.S. at 489 (“if the state is not a party there is no party against whom the decree can be made”) (quoting *Governor of Georgia v. Madrazo*, 1 Pet. 110, 123-124. Here, the district court can grant UUtah all the relief it

seeks by directing the USPTO to correct the inventorship of the Tuschl Patents.<sup>3</sup> While certain of UMass' interests may be "more or less affected by the decision," the court's decree will not deplete the state treasury, compel UMass to act, or instruct UMass how to conform to state law. *Cunningham*, 109 U.S. at 451; *Pennhurst*, 456 U.S. at 106; *Land*, 330 U.S. at 738; *Ex Parte Ayers*, 123 U.S. at 492. Indeed, events aside from the court's judgment may later affect UMass' interests but this is not "the decree operat[ing] against UMass." *Pennhurst*, 465 U.S. at 101, 117 ("here[,] the relief sought and ordered has an impact *directly* on the state itself") (emphasis added); *Hawaii*, 373 U.S. at 58. While UMass would be a proper party in this case, it is not required for the relief UUtah seeks. *Illinois*, 406 U.S. at 97-98.

In sum, whether we focus on the *Cahill* majority or dissent, or take a wider view of the Supreme Court's caselaw, UMass is not a real party in interest here.<sup>4</sup>

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<sup>3</sup> UUtah also requests that the court assign it all rights to the Tuschl patents. However, should UUtah be entitled to these rights, then a decree correcting inventorship would provide all the relief it needs to obtain such rights.

<sup>4</sup> Contrary to the dissent, our decision does not strip the Supreme Court of its discretion to exercise its exclusive jurisdiction nor does it contradict the plain language of § 1251(a). Dissent at 4. As the dissent acknowledges, we must first determine whether the state (i.e. UMass) is a real substantial party in interest. Dissent at 2. Because it is not, this is not a "controvers[y] between two or more states" and the Court's exclusive jurisdiction is not triggered. 28 U.S.C. § 1251(a).

## II. SOVEREIGN IMMUNITY

The district court also considered whether sovereign immunity barred UUtah's suit. And, if so, whether the *Ex Parte Young*, 209 U.S. 123 (1908) exception to sovereign immunity applied. The Eleventh Amendment provides: "The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State." While the Supreme Court has interpreted this amendment as encompassing a broad principle of sovereign immunity *Edelman v. Jordan*, 415 U.S. 651, 662-63 (1974), sovereign immunity "applies only to suits by citizens against a State." *Texas*, 482 U.S. at 130; *Cahill*, 217 F.3d at 101; *but see Virginia Office for Prot. & Advocacy v. Stewart*, 131 S. Ct. 1632, 1638 (2011). Because this case does not involve a suit by citizens against a State, there is no sovereign immunity issue here.

## III. RULE 19

Defendants argue that UUtah's complaint should be dismissed for failure to join UMass, which Defendants contend is an indispensable party under Fed. R. Civ. P. 19. Whether to dismiss under Rule 19 is a two-step inquiry: first, a party must be joined if feasible under Rule 19(a), and second, the party must be indispensable under Rule 19(b). *See United States v. San Juan Bay Marina*, 239 F.3d 400, 405 (1st Cir. 2001). The parties do not dispute that, as a co-owner of the Tuschl Patents, UMass is required to be joined if feasible. At issue is whether UMass is indispensable.<sup>5</sup>

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<sup>5</sup> The dissent notes that parties with an "economic stake" in a patent's validity are proper defendants in a § 256 suit. Dissent at 3, 7; *citing Chou v. University of Chicago*, 254 F.3d 1347, 1359-60 (Fed. Cir. 2001). There is no dispute that UMass could properly be named as a



## A

Before we reach the merits of the district court's ruling that UMass is not an indispensable party, we address our jurisdiction. Defendants have asked us to review this issue under the doctrine of pendent jurisdiction. Such requests are generally disfavored and are granted only in extraordinary circumstances. *See Falana v. Kent State Univ.*, 669 F.3d 1349, 1360 (Fed. Cir. 2012). "These extraordinary circumstances may be present when the nonappealable decision is 'inextricably intertwined' with the appealable decision or when review of the non-appealable decision is 'necessary to ensure meaningful review' of the appealable decision." *Id.* at 1361 (quoting *Swint v. County Chambers Comm'n*, 514 U.S. 48, 51 (1995)). Defendants assert that the Rule 19 judgment is inextricably intertwined with the sovereign immunity issues.

The First Circuit has held that "joinder of a Rule 19 indispensable party may not be waived," and has entertained the question even when it was raised for the first time on appeal. *See Martinez Moll v. Levitt & Sons of Puerto Rico, Inc.*, 583 F.2d 565, 572 (1st Cir. 1978). This court has previously concluded that First Circuit law permits performing the Rule 19(b) analysis for the first time on appeal. *A123 Sys.*, 626 F.3d at 1221; *see also Bacardi Int'l Ltd. V. V. Suarez & Co.*, No. 12-1032, 2013 WL 1919578, at \*5 (1st Cir. May 8, 2013) (declining to remand for the district court to perform a Rule 19 analysis in the first instance when the record was adequate to decide the issue on appeal). On the foregoing basis, we proceed with our analysis of the Rule 19(b) issue.

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defendant in this action but the question is whether it is an indispensable party for purposes of Rule 19(b).

## B

When a party that is required to be joined if feasible under Rule 19(a) cannot be joined, the court must determine whether, in equity and good conscience, the action should proceed among the existing parties or should be dismissed. Fed. R. Civ. P. 19(b). The factors for the court to consider include:

- (1) the extent to which a judgment rendered in the person's absence might prejudice that person or the existing parties;
- (2) the extent to which any prejudice could be lessened or avoided by:
  - (A) protective provisions in the judgment;
  - (B) shaping the relief; or
  - (C) other measures;
- (3) whether a judgment rendered in the person's absence would be adequate; and
- (4) whether the plaintiff would have an adequate remedy if the action were dismissed for non-joinder.

*Id.* In weighing these factors, courts “should keep in mind the policies that underlie Rule 19, ‘including the public interest in preventing multiple and repetitive litigation, the interest of the present parties in obtaining complete and effective relief in a single action, and the interest of absentees in avoiding the possible prejudicial effect of deciding the case without them.’” *Picciotto*, 512 F.3d at 15-16 (quoting *Acton Co. v. Bachman Foods, Inc.*, 668 F.2d 76, 78 (1st Cir. 1982)).

Defendants cite several cases for the proposition that a “patent owner is an indispensable party who must be joined.” Appellant's Br. 43 (quoting *Alfred E. Mann Found. For Sci. Research v. Cochlear Corp.*, 604 F.3d

1354, 1359 (Fed. Cir. 2010)). But these cases deal with standing to bring suit, not with indispensability under Rule 19(b). See *Alfred E. Mann*, 604 F.3d at 1358-59. To be sure, these cases strongly support the conclusion that patent owners are required to be joined if feasible under Rule 19(a). See *Aspex Eyewear, Inc. v. Miracle Optics, Inc.*, 434 F.3d 1336, 1344 (Fed. Cir. 2006) (“For the same policy reasons that a patentee must be joined in any lawsuit involving his or her patent, there must be joinder of any exclusive licensee.”). But they do not create a per se rule that patent owners are automatically indispensable parties—there is no patent-specific exception to Rule 19(b). As this court recognized in *Alfred E. Mann*, when a necessary patent owner is not joined, even when Rule 19(a) is satisfied, the court must still perform the inquiry under Rule 19(b) to determine whether that owner is indispensable. 604 F.3d at 1363; see also *Dainippon*, 142 F.3d at 1272 (“[E]ven if [a patentee] is a necessary party under Rule 19(a) because it would be prejudiced by a holding of invalidity of its patent, this prejudice does not automatically make CFMT indispensable.” (footnote omitted)).

### C

Here, the district court examined each of the four Rule 19(b) factors and concluded that UMass was not indispensable. Although First Circuit law applies to the question of joinder under Rule 19 in this case, the district court and both parties on appeal relied primarily on *Dainippon*, a Federal Circuit case applying Ninth Circuit joinder law. The failure to apply First Circuit law does not automatically compel us to vacate and remand this decision, however, for this is not a case where “the absence of independent analysis (or any analysis at all) is a reason for remand.” *In re Olympic Mills Corp.*, 477 F.3d 1, 9 (1st Cir. 2007). Accordingly, we will not disturb the district court’s decision if its reliance on *Dainippon* is consistent with First Circuit joinder law. See *Rosario-*

*Urdaz v. Rivera-Hernandez*, 350 F.3d 219, 221 (1st Cir. 2003) (“[A]n abuse of discretion occurs when the district court considers improper criteria, ignores criteria that deserve significant weight, or gauges only the appropriate criteria but makes a clear error of judgment in assaying them.”). As we explain below, the district court considered the proper criteria and correctly weighed those criteria in light of the record, and we therefore conclude that its reliance on *Dainippon* did not transform an otherwise proper decision into an abuse of discretion.

In *Dainippon*, a manufacturer sought declaratory judgment of invalidity and non-infringement against a patent holding company and its licensee in the District Court for the Northern District of California. 142 F.3d at 1267-68. The patentee, CFM, had created a wholly owned subsidiary, CFMT, as a holding company for its patent. CFM assigned its patents to CFMT, which then licensed them back exclusively to CFM. *Id.* The district court concluded that it lacked personal jurisdiction over CFMT, the holding company, because CFMT had no ties to California. The court also concluded that CFMT, as the owner of the patent that the manufacturer sought to invalidate, was an indispensable party under Rule 19(b). *Id.* at 1268-69. Accordingly, the court dismissed the suit.

On appeal, this court reversed. Relying on Ninth Circuit law, the court reasoned that prejudice is mitigated when an absent party is adequately represented, and that the presence in the suit of the assignee’s parent company and sole owner was adequate representation. *Id.* at 1272. This was especially true where the parent company effectively controlled the holding company and the two had jointly sought legal assistance in defending their patents. *Id.* The court found the second factor, the ability to shape relief to minimize prejudice, to have little relevance in the absence of prejudice. *Id.* at 1272-73. The court found the third factor, adequacy of the judgment, to be satisfied because a declaratory judgment did not

require an affirmative act by the absent holding company; in other words, relief was not hollow absent joinder. *Id.* at 1273. In light of the strong showing on the first three factors, the court gave little weight to the possibility that all parties might be able to be joined in a different district court. *Id.*

The facts of the instant case support a conclusion of no indispensability even more strongly than in *Dainippon*. On the first factor, the district court concluded that UMass's interests were adequately represented by Defendants—including all of the Tuschl Patent owners except UMass—each of whom stands to lose if inventorship changes. In contrast, no owners were joined in *Dainippon*. Also as in *Dainippon*, Defendants are jointly represented by legal counsel in protecting the Tuschl Patents. In light of these facts, the district court saw no prejudice, and therefore concluded that the second factor had little weight. Additionally, the district court's finding on this prong is strongly supported by the settlement agreement which UMass entered into and handed sole and exclusive control of this suit over to Alnylam, which is a party to this suit. *See* Oral Arg. at 13:07-13:45, 26:45-27:15.

As to the third factor, an order directing the USPTO to correct inventorship would not be insufficient in the absence of UMass, just as findings of invalidity or non-infringement would not have been hollow in *Dainippon*. Defendants argue that such an order would not be binding on UMass. But the order would be binding on the USPTO, and Defendants do not offer any reason why the USPTO would decline to change inventorship, should such an order ultimately be issued. Indeed, were the order to issue, UUtah would receive all of the relief it requests.

Finally, we agree with the district court that the possibility that the Supreme Court would accept original

jurisdiction in this case weighs only slightly against UUtah. Although we do not predict whether the Court would accept such a case, we note that it does so only rarely. See Lawrence Baum, *The Supreme Court* 157 (10th ed. 2010) (observing that out of 70 cases heard by the Court in the 2007 term, only one fell under the Court's original jurisdiction). Accordingly, the availability of another forum in this case is not particularly strong. Certainly, it is less compelling than in *Dainippon*, where this court presumed that the absent party could be joined in the district of Delaware. *Id.* at 1273. In any event, the district court concluded that “this factor [wa]s significantly outweighed” by the other three. We cannot say that this conclusion was an abuse of its discretion.

Although we conclude that the district court did not abuse its discretion in determining that UMass was not indispensable on these facts, we acknowledge that certain of these facts may change on remand. For example, if an unforeseeable conflict of interest arises which negates UMass's assignment to Alnylam of sole and exclusive control over this lawsuit, UMass may be free to renew this motion. See Charles Alan Wright et al., *Federal Practice and Procedure* § 1609, at 128-29 (3d ed. 2001) (“The court is . . . free to reconsider a previously decided question of indispensability if there is a showing of changed circumstances.”). Rule 19 determinations are fact intensive and should be resolved by the district court in the first instance, not by this court in advance.

#### CONCLUSION

We affirm the district court's ruling that this is not a dispute between States falling within the exclusive original jurisdiction of the Supreme Court. UUtah was free to choose between filing this suit in the Supreme Court and filing in federal district court. We also affirm the judgment that UMass is not an indispensable party.

**AFFIRMED**

COSTS

Each party shall bear its own costs.

**United States Court of Appeals  
for the Federal Circuit**

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**UNIVERSITY OF UTAH,**  
*Plaintiff-Appellee,*

v.

**MAX-PLANCK-GESELLSCHAFT ZUR  
FORDERUNG DER WISSENSCHAFTEN E.V., MAX-  
PLANCK-INNOVATION GMBH, WHITEHEAD  
INSTITUTE FOR BIOMEDICAL RESEARCH,  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY,  
AND ALNYLAM PHARMACEUTICALS, INC.,**  
*Defendants-Appellants,*

AND

**ROBERT L. CARET, JAMES R. JULIAN, JR.,  
DAVID J. GRAY, AND JAMES P. MCNAMARA,**  
*Defendants-Appellants.*

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2012-1540, -1541, -1661

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Appeal from the United States District Court for the  
District of Massachusetts in No. 11-CV-10484, Judge  
Patti B. Saris.

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MOORE, *Circuit Judge*, dissenting.

The majority erroneously holds that a patent-  
ownership dispute between two state universities is not a



“controversy between two or more States.” It then compounds this error and holds that a patent owner is not an indispensable party to an action that seeks to reassign title to the patents-in-suit. I respectfully dissent.

### I. Subject Matter Jurisdiction

The district court lacks jurisdiction over UUtah’s claims against the UMass Officials because those claims raise a dispute between two States, Utah and Massachusetts. Article III of the U.S. Constitution vests the Supreme Court with original jurisdiction over cases in which a State is a party. As § 1251(a) expressly states: “The Supreme Court shall have original and exclusive jurisdiction of all controversies between two or more States.” There is no dispute that UUtah and UMass are instruments of Utah and Massachusetts, respectively, and that a suit between those institutions could only be brought in the Supreme Court. *See* Maj. Op. at 9; *Arkansas v. Texas*, 346 U.S. 368, 370–71 (1953). The majority, however, concludes that § 1251(a) does not apply here because UUtah elected to sue the UMass Officials rather than UMass. That conclusion is incorrect.

To determine if a suit implicates the Supreme Court’s exclusive original jurisdiction, we look “behind and beyond the legal form” of the claim and determine “whether the State is indeed the real party in interest.” *Arkansas v. Texas*, 346 U.S. at 371. The majority agrees with this general proposition but holds that the UMass Officials, not UMass, are the real parties in interest. I disagree.

This case involves a dispute between UMass and UUtah over who owns the rights to the Tuschl II patents. UMass is the assignee of the Tuschl II patents and UUtah “wants to own the patents.” Oral Arg. at 43:45–43:54. UUtah is pursuing that interest through a correction of inventorship claim under 35 U.S.C. § 256 and a corresponding request for an order that UUtah owns the patents. J.A. 134–36, 141–43. UUtah claims that one of

its faculty members, Dr. Bass, invented the subject matter claimed in the Tuschl II patents. J.A. 118–34. It alleges that Dr. Bass’s resulting ownership interest flows to UUtah by “operation of law” via an assignment obligation. *Id.*; Oral Arg. 42:44–43:10.

UUtah also alleges in its complaint that it “should be the sole owner or an owner” of the Tuschl II patents. J.A. 134. It specifically requests that the court “order assignment of all right title and interest” in the patents to UUtah. J.A. 142. Indeed, the majority recognizes (1) that UUtah specifically requested that the court assign it all rights to the Tuschl II patents and (2) that UUtah will obtain the rights to the patents if it prevails on its correction of inventorship claims. Maj. Op. at 15 n.3. This is a dispute about ownership, plain and simple.

UUtah cannot recast the nature of this dispute by suing the UMass Officials as stand-ins for UMass. Indeed, the majority never holds that the UMass Officials have any interest in this proceeding. Nowhere does the majority suggest that the UMass Officials are “parties concerned” that may be subject to a correction of inventorship action under § 256(b). *See Chou v. Univ. of Chi.*, 254 F.3d 1347, 1359–60 (Fed. Cir. 2001) (holding that parties with an “economic stake” in the patent are proper defendants in a § 256(b) action). The UMass Officials do not have a real interest in this action.

Section 1251(a) contains “uncompromising language”: the Supreme Court has original and exclusive jurisdiction over “all controversies between two or more States.” *Mississippi v. Louisiana*, 506 U.S. 73, 77 (1992). The majority errs when it concludes that § 1251(a) does not apply to this dispute because the “State has no core sovereign interest” in inventorship or patent ownership. Maj. Op. at 13–15. The majority’s “core sovereign interests” test is at odds with the plain language of the statute, which contemplates “all controversies” between states fall

within 1251, not just those involving core sovereign interests. There is simply no basis to limit the statute in such a way.

Moreover, requiring a core sovereign interest to implicate the Supreme Court's exclusive jurisdiction erodes the Court's discretion to decide which controversies it will hear. The existence of the Supreme Court's exclusive jurisdiction and its discretion to exercise that jurisdiction are separate concepts. The Court's exclusive original jurisdiction extends to "all controversies between two or more States." 28 U.S.C. § 1251(a). The Court, however, is not required to exercise its jurisdiction over every controversy. The Court tends to exercise its jurisdiction sparingly, depending upon the nature of the interest of the complaining State, the seriousness and dignity of the claim, and the availability of another original forum to resolve the dispute. *Mississippi v. Louisiana*, 506 U.S. at 76–77. The concept of a "core sovereign interest" has roots in opinions that address whether the Supreme Court will decide to exercise its jurisdiction over a dispute, not whether the Court's exclusive original jurisdiction over the controversy exists. *See id.* at 77; *Texas v. New Mexico*, 462 U.S. 554, 570, 571 n.18 (1983); *Connecticut ex rel. Blumenthal v. Cahill*, 217 F.3d 93, 109 (2d Cir. 2000) (collecting cases). The majority's conflation of those two concepts strips the Supreme Court of its discretion to decide if a case is sufficiently serious to exercise jurisdiction over it. It reallocates that power to the lower courts—who will decide which subset of cases—those implicating core sovereign interest—will be presented to the Supreme Court.<sup>1</sup>

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<sup>1</sup> The majority baldly asserts that issues of patent ownership and inventorship are not sufficiently grand for the Supreme Court to resolve in the first instance. That is not our decision to make. It is for the Supreme Court to

The majority finds support for its decision in the Second Circuit's split decision in *Cahill*. With all due respect, even if we adopt the flawed logic of the majority in *Cahill*, this case would still fall within the Supreme Court's exclusive jurisdiction in § 1251. The majority correctly recognizes that, generally, a State is the real party in interest if "*the effect of the judgment* would be to restrain the Government from acting, or compel it to act." Maj. Op. at 14 (quoting *Cahill*, 217 F.3d at 106). But the majority nevertheless concludes that UMass is not the real party in interest because a judgment to correct inventorship "will not require or restrain UMass from acting." *Id.* at 13. This is not correct.

A judgment in UUtah's favor will restrain UMass's ability to act. If successful, UUtah will be declared sole owner of the Tuschl II patents and UMass will have no interest in them. UMass will not be able to license or assign the patents. And UUtah will be able to exclude UMass from practicing the inventions claimed in the patents. Patent rights are the quintessential right to restrain. The effect of this judgment will be to prevent UMass from exploiting the Tuschl II patents or the technologies they cover. This certainly "restrain[s] the Government from acting."

UUtah alternatively requests that Dr. Bass be found to be a co-inventor. A finding that Dr. Bass is a co-

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itself decide. And I point out that Universities earn over a billion dollars annually from licensing their inventions. *Universities Report \$1.8-Billion in Earnings on Inventions in 2011*, The Chronicle of Higher Education, <http://chronicle.com/article/University-Inventions-Earned/133972>. Ownership of the Tuschl II patents has significant consequences for Utah and Massachusetts: the patents "have generated hundreds of millions of dollars in revenue." J.A. 134.

inventor of the Tuschl II patents will result in UUtah co-owning those patents. The effect of the judgment would be that UUtah could practice or license the patents *without* UMass's consent and without having to account to UMass. *See* 35 U.S.C. § 262. The judgment would thus restrain UMass from asserting its rights in the Tuschl II patents against UUtah or any of UUtah's licensees. Again, this restrains UMass from acting.

The majority ignores these effects on UMass. Without explanation, the majority asserts that UMass will only be “more or less affected by the decision” and that transfer of the Tuschl II patents to UUtah will “not deplete the state treasury.” Maj. Op. at 15. This is incorrect. A correction of inventorship by the PTO will give UUtah an ownership interest in the Tuschl II patents by operation of law and dilute or revoke UMass's property interest. Indeed, as the majority also recognizes, UUtah expressly asks the court to order the reassignment of the patents to UUtah. The central effect of a judgment in UUtah's favor will be to deplete the assets of the current owners of the Tuschl II patents, one of whom is UMass. UMass is thus the real party in interest in this case.

This is a dispute between two state universities over who owns a valuable patent portfolio—a dispute over property ownership. As undesirable as it may be, we are bound to follow the plain language of § 1251(a): “The Supreme Court shall have original and exclusive jurisdiction of all controversies between two or more States.” It is up to the Supreme Court to decide if it wants to exercise its exclusive jurisdiction over this controversy. We should not contort the statute to avoid a perceived injustice<sup>2</sup> that

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<sup>2</sup> We note that Dr. Bass and UUtah could have protected their rights to the invention claimed in the Tuschl II patents without invoking the Supreme Court's exclusive original jurisdiction. Dr. Bass could have filed her

would result if the Court declined to exercise jurisdiction over UUtah's claims.

UUtah initiated an action that seeks to obtain UMass's interest in the Tuschl II patents. That is a controversy between two States and can only be brought in the Supreme Court. Accordingly, we should reverse the district court's decision that it had jurisdiction over UUtah's claims against the UMass Officials.

## II. Indispensable Party

The majority's holding that UMass is not an indispensable party to this action is incorrect. We have held that when a plaintiff brings a declaratory judgment action seeking to invalidate a patent or hold it not infringed, the patentee is both a necessary and indispensable defendant in that action. *A123 Sys., Inc. v. Hydro-Quebec*, 626 F.3d 1213, 1217–19, 1220–22 (Fed. Cir. 2010); *Enzo APA & Son, Inc. v. Geapag A.G.*, 134 F.3d 1090, 1094 (Fed. Cir. 1998). It would be nonsensical to suggest that all patent owners must be joined in a suit seeking to invalidate the patent, but they need not be joined in a suit over patent ownership. Indeed, § 256(b) requires a court, before it orders a correction of inventorship, to provide “notice and hearing of all parties concerned,” *i.e.*, those with an “economic stake” in the patent. *Chou*, 254 F.3d at 1359–60. We should apply our general rule that all co-owners must be joined in an action that affects their patent. *See Ethicon, Inc. v. U.S. Surgical Corp.*, 135 F.3d 1456, 1467 (Fed. Cir. 1998).

The majority instead holds that UMass is not an indispensable party because UUtah joined “all of the Tuschl Patent owners except UMass,” each of whom are “jointly represented by legal counsel.” Maj. Op. at 21. It is not

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own patent application and provoked an interference proceeding at the PTO.

enough that UMass and the named defendants “share the same overarching goal” of defeating UUtah’s inventorship and ownership claims. *A123 Sys.*, 626 F.3d at 1221 (holding that absent patentee was an indispensable party when the named party had “overlapping” but not “identical” interests).

The majority deviates from our longstanding requirement that all patent owners be joined, citing an exception created in *Dainippon Screen Manufacturing Co. v. CFMT, Inc.*, 142 F.3d 1266 (Fed. Cir. 1998). It is true that, like *Dainippon Screen*, the named defendants here are represented by common counsel. But the majority omits the “highly relevant” facts from *Dainippon Screen*—the absent party was a wholly-owned subsidiary of the named party and was created by the named party to enforce the patents-in-suit. 142 F.3d at 1267–68, 1272–73. We allowed the suit to go forward because “the parties’ interests in the asserted patents were not just common, but identical.” *A123 Sys.*, 626 F.3d at 1221 (discussing *Dainippon Screen*).

There is no party in this suit which represents UMass’s interest in the Tuschl II patents. Other defendants also have an interest in the patents, but they do not represent UMass’s interest. Indeed, their interests may well diverge. For example, the non-UMass defendants may choose to settle with UUtah in a way that diminishes UMass’s rights, such as stipulating that Dr. Bass is the sole inventor of the Tuschl II patents in exchange for ownership interests in the patents. That risks extinguishing UMass’s rights to the patents without UMass participating in the lawsuit.

The majority further claims that defendant Alnylam can represent UMass’s interest because UMass “handed sole and exclusive control of this suit over to Alnylam.” Maj. Op. at 21. That right, however, is conditional. If there is a conflict of interest, Alnylam loses its right to

control UMass's defense. *Id.* The agreement thus contemplates that Alnylam and UMass may not have identical interests. Because UMass does not have identical interests with any of the named defendants, it is an indispensable party in this case. I dissent from the majority's contrary holding.