                    UNITED STATES DISTRICT COURT

                      DISTRICT OF NEW HAMPSHIRE

ANSYS, Inc.,
      Plaintiff

      v.   Civil No. 09-cv-284-SM
                                          Opinion No. 2009 DNH 177
Computational Dynamics North America,
Limited, d/b/a CD-adapco, and
Doru A. Caraeni, Ph.D.,
      Defendants

                         O R D E R

     For approximately seven years, Dr. Doru Caraeni worked at

ANSYS, Inc., developing code for software used in computational

fluid dynamics ("CFD") simulations. In May of 2009, he resigned

his position at ANSYS and went to work for its largest

competitor: Computational Dynamics North America ("CDNA"). Three

months later, ANSYS filed this suit against CDNA and Caraeni

seeking preliminary and permanent injunctive relief, as well as

compensatory damages. Specifically, ANSYS's five-count complaint

advances the following claims: breach of contract (non-

competition) against Caraeni; breach of contract (non-disclosure)

against Caraeni; intentional interference with contractual

relations against CDNA; misappropriation of trade secrets against

Caraeni and CDNA; and unfair trade practices against CDNA.

Pending before the court is ANSYS's request for preliminary injunctive relief, by which it seeks to enforce the provisions of a one-year covenant not to compete that was part of Caraeni's employment contract with ANSYS. A hearing was held on October 21, 2009, at which the parties appeared and presented evidence and oral argument. For the reasons discussed below, ANSYS's motion for a preliminary injunction is denied.

Standard of Review

I. Injunctive Relief.

"It frequently is observed that a preliminary injunction is an extraordinary and drastic remedy, one that should not be granted unless the movant, by a clear showing, carries the burden of persuasion." Mazurek v. Armstrong, 520 U.S. 968, 972 (1997) (quoting 11A C. Wright, A. Miller, & M. Kane, Federal Practice and Procedure § 2948, pp. 129-130 (2d ed. 1995)) (emphasis in original). To obtain a preliminary injunction, ANSYS must establish each of the following: (1) a likelihood of success on the merits of its claims (either at summary judgment or at trial); (2) the potential for irreparable harm if an injunction is not issued; (3) that the hardship imposed upon defendants if they are enjoined will be less than the hardship ANSYS will suffer if no injunction issues; and, finally, (4) that issuance of an injunction is consistent with (or at least not contrary to)

the public interest. See Ross-Simons of Warwick, Inc. v. Baccarat, Inc., 102 F.3d 12, 15 (1st Cir. 1996); Douglass v. Londonderry Sch. Bd., 372 F. Supp. 2d 203, 204 (D.N.H. 2005).

II.   Covenants Not To Compete.

ANSYS's motion for preliminary injunctive relief is based primarily on its claim that Caraeni breached (and continues to be in breach of) his agreement not to compete with ANSYS. See Plaintiff's memorandum (document no. 2-2) at 2. It adds, however, that it is also entitled to injunctive relief because of Caraeni's alleged violation of both his contractual and statutory obligation not to disclose any of ANSYS's confidential or trade secret information. ANSYS's likelihood of success on the merits, then, turns on its ability to demonstrate: (1) that the covenant not to compete is enforceable against Caraeni under the circumstances presented in this case; and/or (2) that Caraeni has disclosed, or is likely to disclose, confidential and trade secret information he acquired during his employment by ANSYS.

Generally speaking, New Hampshire's public policy discourages covenants not to compete. See Concord Orthopaedics Prof'l Ass'n v. Forbes, 142 N.H. 440, 442 (1997). They are, therefore, narrowly construed. See Merrimack Valley Wood Prods. v. Near, 152 N.H. 192, 197 (2005). Nevertheless, covenants not

to compete "are valid and enforceable if the restraint is reasonable, given the particular circumstances of the case." Id.

Whether a covenant not to compete is reasonable is a question for the court to resolve. Concord Orthopaedics, 142 N.H. at 443. For it to be reasonable, a restraint on employment must meet each of the following three criteria: first, it must be no greater than necessary for the protection of the employer's legitimate interest; second, it cannot impose undue hardship on the employee; and, finally, it must not be contrary to the public interest. Id. If a restrictive employment covenant fails to meet any one (or more) of those criteria, it is unenforceable. And, as to the first of those three criteria, the New Hampshire Supreme Court has held:

> The first step in determining the reasonableness of a given restraint is to determine whether the restraint was narrowly tailored to protect the employer's legitimate interests. Legitimate interests of an employer that may be protected from competition include: the employer's trade secrets that have been communicated to the employee during the course of employment; confidential information other than trade secrets communicated by the employer to the employee, such as information regarding a unique business method; an employee's special influence over the employer's customers, obtained during the course of employment; contacts developed during the employment; and the employer's development of goodwill and a positive image.

ACAS Acquisitions (Precitech), Inc. v. Hobert, 155 N.H. 381, 389 (2007) (citations omitted).

In this case, ANSYS says it is concerned that Caraeni might share with his new employer – CDNA – confidential and/or trade secret information acquired during the course of his employment at ANSYS. It is not enough, however, for ANSYS merely to have a generalized or abstract concern that its confidential and/or trade secret information might be compromised because a former employee now works for a competitor. Instead, as the party seeking to enforce the covenant not to compete, ANSYS must show that there is a reasonable basis to believe that Caraeni might actually <u>use</u> or <u>share</u> that confidential and/or trade secret information for the benefit of CDNA. <u>See</u> <u>id</u>. at 392. <u>See also</u> <u>Kelly Services, Inc. v. Greene</u>, 535 F. Supp. 2d 180, 185–86, 188 (D. Me. 2008) (concluding that plaintiff did not show a likelihood of success on the merits, given its failure to "allege any specific acts of actual or threatened misappropriation [of trade secrets or confidential information]").

Factual Background

At the evidentiary hearing, defendants called Dr. Wayne Smith, the General Manager of CDNA, and Dr. Doru Caraeni. ANSYS called Dr. Nelson Carter. Based upon the testimony of those

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witnesses, as well as the record evidence, the court makes the following findings of fact.

ANSYS and CDNA produce and sell competing CFD software products. Essentially, it appears that each product employs mathematical principles and algorithms to model fluid and gas flows in various environments and over different complex surfaces. Together, the two companies account for roughly 80 percent of the worldwide market share in this highly specialized and advanced field.

At a very general level, the CFD software products sold by ANSYS and CDNA function (and are created) fairly similarly. First, publicly disclosed mathematical algorithms (i.e., algorithms published in scholarly journals) are reviewed and selected for potential use in the company's product. Then, software code is written so that a chosen algorithm can be "tweaked" or modified as necessary to fit into the product. And, through a process of trial and error, that code is further refined to make it more efficient – that is, to make it solve problems presented more quickly and/or more accurately.

Although ANSYS and CDNA are competitors, the companies do have certain connections dating back several years. Beginning in

the late 1980's, Dr. Smith worked for ANSYS's predecessor
(Fluent, Inc.) and helped develop an "unstructured solution
adaptive parallel CFD software product." Smith Affidavit
(document no. 13-3) at para. 3. That software formed the
foundation of FLUENT 4 and was incorporated into later versions
of FLUENT, including the product currently sold by ANSYS as
FLUENT 12.[1] According to Smith, the "ANSYS code that [currently]
competes in the market against [CDNA's CFD software] is the code
that [he] began work on in 1987. Although the ANSYS code has
been revised and supplemented, it has not been fundamentally
changed since it was originally introduced." Id. at para. 20.

In October of 1999, ANSYS and Dr. Smith parted ways over
strategic development, and perhaps other disagreements. CDNA
promptly hired Dr. Smith to develop that company's next
generation CFD software product. Shortly thereafter, Smith hired
three more former ANSYS employees and began working on CDNA's
next generation CFD software. According to Smith, the resulting
software was the product of more than five years of research and
planning, was written in a different programming language than
the ANSYS product (C++ and JAVA, rather than C and Lisp), and it
was based upon an entirely different architecture than the ANSYS

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[1]   In 2006, ANSYS purchased Fluent, Inc. For the sake of
simplicity, the court will refer to those companies simply as
"ANSYS."

product. Smith Affidavit, at para. 13. Although Smith contributed significantly to the architecture and code of the ANSYS product, not a single line of code from that product was used in the CDNA product – at least in part because the programs are written in different languages, they have entirely different architectures, and they adopt different approaches to solving problems and simulating fluid flows. Nevertheless, ANSYS sued Smith and the three other former ANSYS employees, alleging that they had misappropriated ANSYS's trade secrets. <u>Fluent Holdings, Inc. v. Computational Dynamics North Am., Ltd.</u>, No. 00-E-057 (Grafton Sup. Ct. 2000) ("<u>ANSYS I</u>"). It is unclear how that dispute was ultimately resolved, but the record does reveal that ANSYS was denied the preliminary injunctive relief it sought.

II. <u>Dr. Doru Caraeni's Covenant Not to Compete</u>.

In 2002, Dr. Caraeni was hired by ANSYS's predecessor (Fluent) to develop code for existing, as well as next generation, CFD software. As a condition of his employment, Caraeni signed an "Employee Confidentiality, Non-Disclosure, and Non-Competition Agreement" (the "Covenant not to Compete"). Complaint, Exhibit I (document no. 1-10). In it, Caraeni acknowledged that he understood:

> that computer programs (source code, object code and code portions), programs and system documentation, manuals, engineering drawings, plans, specifications,

program capabilities, algorithms, methods and other
similar materials are developed at significant expense
by Fluent, or in some cases, entrusted to Fluent by its
clients and business partners. In some cases all or
portions of this information is subject to greater than
routine efforts by Fluent to maintain such materials as
secret, which secrets may be identified as such by
written or printed legends or other means. Other
information may be subject to lesser protective
efforts, but are nevertheless confidential, such as,
for example, the identities of Fluent's customers,
suppliers, consultants, marketing plans, development
plans, and information concerning the nature or
direction of research and development efforts. All of
the foregoing shall constitute Confidential
Information.

Id. at 1. Caraeni agreed that he would not disclose any

Confidential Information and, "for a period of one (1) year

following termination of [his] employment with Fluent, [he would]

not become an employee, director, consultant, or in any way

engage in or contribute [his] knowledge to a competitor of Fluent

within North America or within countries where Fluent has

subsidiary corporations." Id. at 2. In 2006, after ANSYS

acquired Fluent, Caraeni executed an amendment to his Covenant

not to Compete, in which he agreed to be bound by the same terms

and conditions during the course of his employment by ANSYS (and

for one year following termination of that employment). See

Complaint, Exhibit K (document no. 1-12).

III. <u>ANSYS's Claims Against Caraeni and CDNA</u>.

In simple terms, ANSYS is concerned that Dr. Caraeni will share its confidential and/or trade secret information (e.g., programming "tweaks" or "tricks" applied to the code so it and/or the publicly-known algorithms run more efficiently) with his new employer, CDNA. CDNA says that is not possible. First, it claims that because it and ANSYS are the two major players in this highly technical field, it is not unusual for employees to move between the two companies; if they wish to stay in this field, they have very few other employment opportunities. Accordingly, CDNA says it has adopted (and enforces) a strict policy which prevents its employees from using any confidential or trade secret information of a competitor.

Moreover, says CDNA, even if Dr. Caraeni wanted to use ANSYS's confidential or trade secret information and tried to incorporate it into CDNA's software, he could not. Although, at least on a superficial level, the competing products sold by ANSYS and CDNA are created similarly and function to solve similar problems, they are built on very different software platforms or, as the witnesses testified, "architectures." Because those architectures are so different, it would not be possible for Caraeni to, for example, simply copy software code from the ANSYS product into the CDNA product. And, says CDNA, it

would be equally impossible for Caraeni to employ any of the
techniques he might have learned or developed while at ANSYS for
incorporating various algorithms into the source code. The same
is true, says CDNA, with respect to any of the coding "tweaks"
that Caraeni might have learned to make the ANSYS software more
efficient. By way of analogy, CDNA suggests that all the
confidential information and/or trade secrets that Caraeni might
have acquired from ANSYS is akin to information concerning the
design, construction, and refining of an internal combustion
engine. At CDNA, however, he is working on an electric motor, so
none of the solutions, skills, tricks, tweaks, or innovations
that he might have learned or developed for, say, improving the
fuel efficiency of a four-stroke engine can be translated to his
current work.

ANSYS disagrees, claiming that much of the confidential and
trade secret information Dr. Caraeni acquired while in its employ
could be used to enhance and refine the CDNA product. So, for
example, in his affidavit, Dr. Thomas Tysinger, testified that:

> While ANSYS does not claim that known theories are
> confidential, all of the new and unique solutions in
> Tap and Flux are proprietary and confidential. Dr.
> Caraeni himself created such information, and therefore
> has intimate knowledge of it. While ANSYS understands
> that Dr. Caraeni could not simply cut-and-paste the TAP
> and Flux code into STAR-CCM+ [CDNA's CFD product], he
> can use his knowledge of how he implemented
> functionality in TAP to implement the same or similar

functionality in STAR-CCM+. Even if STAR-CCM+ already
contains the same or similar functionality as TAP and
Flux, Dr. Caraeni could use his knowledge to improve
corresponding functionality in STAR-CCM+.

Tysinger Affidavit (document no. 24) at para. 10. <u>See also</u>
Hearing Testimony of Dr. Nelson Carter, at pages 111-17.

Discussion

I. <u>Likelihood of Success on the Merits</u>.

The parties' factual disagreement over whether ANSYS's trade
secrets and/or confidential information can be applied to CDNA's
code is a significant dispute in this case. At this juncture, it
remains unresolved. ANSYS has not persuaded the court that
Caraeni's work for CDNA poses a genuine risk that its trade
secrets or confidential information will be disclosed for the
benefit of CDNA.

Accordingly, based upon the record currently before the
court, it cannot conclude that ANSYS has carried its burden to
demonstrate that it is likely to succeed on the merits of its
claims. Even assuming that the covenant not to compete's
geographic scope (worldwide) and temporal limitation (one-year)
are sufficiently narrowly-tailored under the circumstances, ANSYS
has failed to demonstrate that there is a reasonable possibility

that Caraeni will disclose confidential and/or trade secret

information during the course of his employment by CDNA.

As was the case in the parties' earlier state court

litigation, ANSYS has not clearly identified the trade secrets it

believes Caraeni and/or CDNA might appropriate. Nor has it

clearly distinguished between those alleged trade secrets and

Caraeni's general knowledge of mathematics, physics, and computer

programming – information not subject to trade secret protection.

As the state court pointedly observed:

> [ANSYS] failed to meet its burden to establish the
> existence of a trade secret or secrets. Exhibit 8 and
> the testimony presented at the hearing by petitioner's
> employees fails to establish with any degree of
> specificity the trade secrets ANSYS seeks to protect.
> Witnesses for the petitioner continuously made
> reference to the "tricks" that the programmers used to
> make the general concepts part of the software code.
> Respondents denied knowledge of any "tricks." It is
> conceivable that "tricks" could be entitled to
> protection. Nonetheless, based upon the facts
> presented, the Court is unable to parse the "tricks"
> from the experience and skill of the programmers.

ANSYS I, Order denying preliminary injunctive relief (N.H. Sup.

Ct. May 5, 2000) (citations omitted).

For the same reasons that ANSYS has failed to demonstrate a

likelihood of success on the merits of its breach of contract

claims (i.e., non-disclosure and covenant not to compete), it has

also failed to show a likelihood of success on its statutory claim that Caraeni and/or CDNA have misappropriated its trade secrets.

II. Irreparable Injury.

Moreover, even if it had shown that Caraeni possesses some of its confidential or trade secret information, ANSYS has failed to demonstrate that he is likely to use that information during the course of his employment at CDNA. Although the court lacks the comprehensive understanding of the mathematics, fluid dynamics, and computer programming necessary to fully understand the parties' competing software products, it does find credible the testimony of Dr. Smith.[2] Crediting that testimony as true (at least for purposes of resolving ANSYS's pending motion), the court is compelled to conclude that ANSYS has not shown the potential for irreparable injury in the absence of injunctive relief.

First, Smith credibly testified that CDNA maintains and enforces a strict policy preventing its employees from using confidential and trade secret information they may have acquired

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[2]   Presumably, at trial the parties will present testimony of independent experts regarding the various principles of mathematics and physics that must be understood in order to fully comprehend the nature of ANSYS's claims and defendants' defenses.

from prior employers. See, e.g., Hearing testimony of Wayne

Smith, Ph.D. (Oct. 21, 2009), at pages 45 and 66.[3] See generally

Kelly Services, 535 F. Supp. 2d at 188-89 ("Kelly Services' claim

that it will suffer irreparable harm simply as a result of Greene

working for Maine Staffing is also unpersuasive. The affidavits

submitted by Greene and Mark Burns show that Greene can be

employed by Maine Staffing without disclosing or using any

protected information of Kelly Services.") (citation omitted).

        The court also finds credible Dr. Smith's testimony that Dr.

Caraeni has not been assigned (and, in the near-term is not

expected to be assigned) to perform any work at CDNA that might

allow him to use any of ANSYS's confidential or trade secret

information. Additionally, given the fact that CDNA's and

ANSYS's products are built upon different architectures, the

court credits Dr. Smith's testimony that any confidential or

trade secret information that Caraeni might have acquired from

ANSYS simply would not usefully translate to work performed on

CDNA's CFD software.

> [Dr. Doru Caraeni's] work to date at CDNA has not
> involved the areas in which he worked at ANSYS. ANSYS
> claims that Doru's work for CDNA "will entail

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        [3]   References to the transcript of the hearing are to a
rough, unedited transcript prepared by the stenographer. If an
official transcript is prepared, page references may be slightly
different.

researching and developing code for high-speed flow."
This is incorrect; he has not done any work for CDNA in
this area. No matter what the field of work to which
he is assigned, I am confident that he can do the work
without using or disclosing to CDNA personnel any
Fluent or ANSYS trade secrets. The CDNA code uses an
entirely different architecture than the Fluent code
(since I wrote both, I can state with certainty the
extent of the difference), and the material in the
current ANSYS code simply would not assist us in the
least in our work on STAR-CCM+ code. Even if the new
work at ANSYS on Flux or the work on TAP or NCS is
interesting and cutting edge, there is no reason to
expect that it would assist CDNA in the least and, more
important, CDNA has an unbending policy against the use
of confidential information. We have followed that
policy to the letter.

Smith Affidavit at para. 38.

Crediting that testimony as true, the court concludes that
ANSYS has failed to demonstrate that it will suffer irreparable
injury in the absence of injunctive relief.

Conclusion

Having concluded that ANSYS has failed to demonstrate either
a likelihood of success on the merits of its claims or
irreparable injury in the absence of the injunction it seeks,
ANSYS is not entitled to a preliminary injunction. Accordingly,
plaintiff's motion for preliminary injunction (document no. 2) is
denied. It's motion to strike (document no. 27) is likewise
denied, in light of defendants' responsive pleading and
additional submissions.

SO ORDERED.

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Steven J. McAuliffe
Chief Judge

November 25, 2009

cc: Shelli L. Calland, Esq.
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