

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

SYNOPSISYS, INC., a Delaware corporation,

Plaintiff,

vs.

MAGMA DESIGN AUTOMATION, INC. a
Delaware corporation,

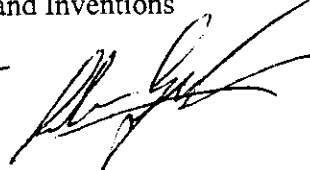
Defendant.

CASE NO. C-04-03923 MMC
**DECLARATION OF LUKAS VAN
GINNEKEN**

I, Lukas van Ginneken, have personal knowledge of the statements and facts set forth herein and do hereby declare under penalty of perjury under the laws of the State of California and the United States of America that the following is true and correct:

1. In 1995, I was hired by Synopsys, Inc. ("Synopsys") to work in the development of Synopsys' logic synthesis and related technologies. I was given the responsibility to work on research pertaining to logic synthesis, and was asked to make contributions to the technical vision for Synopsys' logic synthesis team. I understood that, given my prior experience in the field, Synopsys was relying upon me to provide leadership and vision to the development of Synopsys' products and technology.

2. On or about May 17, 1995, I signed a Proprietary Information and Inventions

3/10/05 

1 Agreement (the "Agreement"; attached as Exhibit "1" hereto). I understood that signing the
2 Agreement was a condition to my employment by Synopsys.

3 3. I know of no reason why the Agreement is not valid and fully enforceable against me.

4 4. As reflected in the attachment marked as Exhibit "A" to the Agreement, I attached a
5 list of "inventions or improvements" which I had contributed to before my employment at Synopsys.
6 I believed then, and continue to believe now, that this list was accurate except for patents and patent
7 applications and research reports in which I was involved at IBM.

8 5. Neither the patents, patent applications and research reports in which I was involved
9 at IBM nor the inventions or improvements listed in Exhibit "A" to the Agreement disclose the
10 inventions ultimately claimed in U.S. Patent No. 6,453,446 or U.S. Patent No. 6,725,438 (hereinafter
11 collectively referred to as the "Patents"). In fact, I did not conceive of any of the inventions
12 disclosed in the Patents before I joined Synopsys.

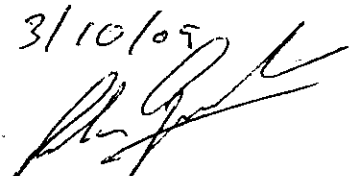
13 6. After signing the Agreement, I started my employment at Synopsys on or about June
14 26, 1995.

15 7. At no time during my employment at Synopsys, or anytime thereafter, did I object to
16 the scope or terms of the Agreement, or ask Synopsys for any waiver from the enforcement of its
17 provisions.

18 8. In early 1996, as part of my job to research and explore new product ideas for
19 Synopsys, I conceived the idea of creating an Electronic Design Automation ("EDA") product that
20 would use the concept of fixed timing.

21 9. Under the concept of fixed timing, the timing delays of a chip design are held
22 constant and "fixed," in contrast to determining timing delay at a later point in the design flow.
23 Because fixed timing involves holding the timing delay constant, it can also be referred to as
24 "constant delay."

25 10. The inventions I conceived while employed by Synopsys were designed to implement
26 this concept of fixed timing/constant delay into an EDA tool that performed logic synthesis,
27 placement, and/or related tasks. These were the same inventions that were later disclosed in the
28 Patents.

3/10/05


1 11. In addition, by early 1996, I had conceived of inventions while employed by
2 Synopsys pertaining to the use of "gain-based synthesis," which is one of the ways in which the
3 fixed timing concept can be implemented in a logic synthesis and/or placement tool.

4 12. In early 1996, I participated in a meeting with other Synopsys personnel to discuss
5 ideas for Synopsys' next-generation synthesis product (code named "NGSS" or "Synzilla"). During
6 this meeting, I set out the basic concept for my fixed timing inventions. I was directed to research
7 the issue further and report my findings at a later meeting.

8 13. During a subsequent meeting in 1996, I gave a further presentation to Synopsys
9 personnel concerning the inventions I developed while employed at Synopsys. During the meeting, I
10 discussed how Synopsys could implement the inventions in its tools. During the course of this
11 meeting, I was successful in convincing others at Synopsys that the company should consider
12 redirecting its efforts towards implementing these inventions.

13 14. It is my understanding that the conception of the inventions I developed while a
14 Synopsys employee is thoroughly documented in Synopsys' records.

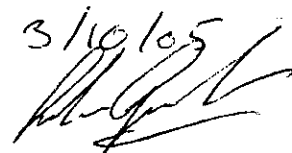
15 15. In early 1996, I filled out an invention disclosure form (attached as Exhibit "2"
16 hereto) attesting that my fixed timing inventions were conceived by myself alone. This invention
17 disclosure, under the title "Constant Delay Synthesis" (the "Constant Delay Synthesis Disclosure"),
18 states as follows:

19 Constant delay synthesis is an entirely different paradigm for delay optimization in
20 logic synthesis. It promises to radically simplify the design process from behavioral
21 synthesis down to physical desing [sic]. It is probably more of a philosophy than an
22 algorithm. Using this philosophy many common optimization algorithms, such as
 mapping, retiming, behavioral synthesis, delay [&] area optimization, placement can
 be reformulated in a much simpler form.

23 16. In the Constant Delay Synthesis Disclosure, I truthfully represented my
24 understanding that I was the sole inventor of the fixed timing inventions as described in the
25 disclosure form..

26 17. In the Constant Delay Synthesis Disclosure, I truthfully represent that the fixed
27 timing inventions were being considered as the "cornerstone" of the NGSS project at Synopsys.

28 18. In the Constant Delay Synthesis Disclosure, I stated my understanding that "[i]t is

3/10/05


1 important that Synopsys acquires patent protection in this area, even though some prior art exists.”

2 19. It is my understanding that my conception of these inventions while employed at
3 Synopsys is further documented in the performance reviews I received at Synopsys. For instance, in
4 my performance review for the period March 1, 1996 to April 1, 1997 (attached as Exhibit “3”
5 hereto), Synopsys stated that “[o]ver the past year within the Advanced Technology Group, you have
6 had basically one objective: driving through the next generation synthesis effort based on constant
7 delay.” The review further stated:

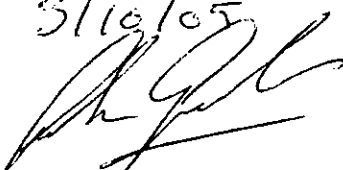
8 “Your primary objective over the past year has been driving the technical direction of
9 the Synzilla project, bringing to fruition your ideas on applying constant delay to
10 Synopsys next generation synthesis effort. This project represents a major milestone
11 and direction for Synopsys, and your efforts have been instrumental in effecting the
12 project. One year ago, Synzilla was an idea in your head; it is currently a staffed
13 project that has met aggressive milestones and schedules and that has strong support
14 from outside partners.”

15 20. Similarly, another of my performance reviews (attached as Exhibit “4” hereto)
16 accurately discussed the presentation of the fixed timing inventions in one of the internal Synopsys
17 meetings in early 1996:

18 “Lukas, you demonstrated true vision and original thinking in one of the NGSS
19 meetings when you presented your ‘constant delay’ ideas. I think that in the process
20 of one hour, you presented a change in the synthesis paradigm to the best technical
21 minds at Synopsys, they accepted that the idea has a lot of merit, and the team
22 initiated a project to investigate this further. This is really exciting!”

23 21. In order to obtain patent protection for the fixed timing and gain-based synthesis
24 inventions I conceived while employed at Synopsys, I proceeded to work with Synopsys’ patent
25 counsel in order to draft a patent application. A patent application was ultimately drafted containing
26 the same inventions that were later disclosed in the Patents.

27 22. One draft of the patent application (attached as Exhibit “5” hereto) was entitled
28 “System and Method for Constant Delay Synthesis,” and contained disclosure of my inventions for
fixed timing, including use of fixed timing in relation to logic synthesis and placement, equal slack
sizing, area estimation, buffering, bipartitioning, iterative placement, and net weights. All of the
inventions contained in this application were solely conceived by me at Synopsys. I never disclosed
this draft patent application to the public, and I have no reason to believe that it was not maintained
by Synopsys as proprietary and confidential.

3/10/05


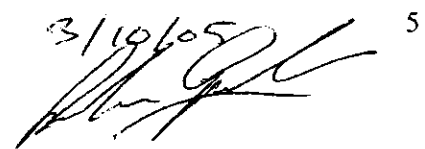
1 23. After the creation of this draft, work on the application continued, and eventually a
2 subsequent draft was created. This draft (attached as Exhibit "6" hereto) was entitled "Method for
3 Achieving Timing Closure of Digital Networks and Method for Area Optimization of Digital
4 Networks Under Timing Closure." This draft more thoroughly disclosed the inventions I conceived
5 of while employed at Synopsys, and described in detail the use of fixed timing in relation to network
6 slack, library independent optimization, mapping for delay, post mapping optimization, pin
7 swapping, boundary moves, area estimation, net weights, buffering, stretching, placement,
8 partitioning, and final or discrete sizing. All of the inventions contained in this application were
9 solely conceived by me at Synopsys. I never disclosed this draft patent application to the public, and
10 I have no reason to believe that it was not maintained by Synopsys as proprietary and confidential.

11 24. In addition to the preparation of the draft patent applications, I also authored a "white
12 paper" on the fixed timing inventions. The white paper was titled "The Constant Delay
13 Methodology," and set forth several aspects of the inventions contained in the Patents. This paper
14 contained, for instance, a description of the use of fixed timing as it related to logical effort and gain,
15 sizing and placement, buffering, transition time effects, area optimization, and area estimation. The
16 end of the paper recommended that Synopsys adopt the fixed timing methodology for its tools.

17 25. After this white paper was created, I authored a new paper with the title "Driving on
18 the Left-Hand Side of the Performance Speedway." Once again, this paper provided a description of
19 numerous aspects of the inventions I conceived of that are contained in the Patents.

20 26. I understand that, as the above indicates, by the middle of 1996 Synopsys had
21 extensive confidential documentation describing, in great detail, inventions I conceived while
22 employed at Synopsys. Synopsys did not ever give me permission to take or use this documentation,
23 or any of the inventions described therein, for the benefit of another company. To the contrary, I
24 understood that under the Agreement the inventions that I conceived were and are the property of
25 Synopsys, and were assigned to Synopsys the instant that they were conceived.

26 27. At some point in 1997, I decided to resign from Synopsys to pursue other
27 opportunities. Instead, however, of pursuing ideas at another company that were unrelated to
28 Synopsys' confidential information, I was offered another position where I could continue utilizing

3/10/05
 5

1 the inventions I conceived at Synopsys.

2 28. In May of 1997, I formally resigned from Synopsys in order to join Magma, which
3 had been incorporated on April 1, 1997. In my resignation letter, I stated that I was resigning to join
4 a "newly formed startup company," and stated that my departure "should not be construed as a lack
5 of faith in the technical approaches which I have been advocating."

6 29. I have reason to believe that, at a minimum, my supervisor at Magma knew that the
7 fixed timing inventions Magma was intending to use were conceived by myself at Synopsys, and
8 were encompassed by my Agreement with Synopsys.

9 30. I used for Magma's benefit the inventions contained in Synopsys' draft patent
10 applications, and the inventions from these applications ultimately formed the basis for the patent
11 applications I helped prepare for Magma. I also used for Magma's benefit my knowledge of the
12 information contained in at least one of the white papers that I had created for Synopsys.

13 31. Magma and I used the inventions that I conceived while employed at Synopsys as a
14 technical foundation for Magma's products.

15 32. At no time did Synopsys ever provide me, or, to my knowledge, Magma, any
16 permission to take Synopsys inventions or related information.

17 33. Beginning in 1997, Magma proceeded to extensively use the inventions and
18 information described in the Synopsys draft patent applications and confidential white paper in order
19 to create the patent applications that would ultimately result in the issuance of the Patents.

20 34. During the course of using the inventions belonging to Synopsys, Magma labeled
21 these inventions as Magma's "FixedTiming" methodology. I do not dispute that Magma
22 incorporated Synopsys' inventions into Magma's product line, and proceeded to use these inventions
23 as a technical foundation for its products.

24 35. As of July 1997, Magma was in possession of inventions and information set forth in
25 the confidential patent applications drafted for Synopsys.

26 36. In a letter from Pillsbury dated August 18, 1997 (Exhibit "7" hereto), through
27 Magma's legal counsel, Magma and I made the following representations and assurances to
28 Synopsys: (1) "Dr. van Ginneken intends to honor his obligations under his Proprietary Information

1 Agreement with Synopsys,” (2) “Magma is in the practice of taking appropriate steps to protect . . .
2 the trade secrets of its employees’ former employers,” (3) “Dr. van Ginneken will protect Synopsys’
3 proprietary information during his employment at Magma,” (4) “Magma is confident that Dr. van
4 Ginneken has and will continue to abide by the terms of the Magma Agreement in the performance
5 of his duties for Magma,” and (5) “Magma will reiterate to Dr. van Ginneken his duty to abide by his
6 Synopsys Agreement.” At the time that this letter was sent, I knew that at least statements (1) and
7 (3) above were false. In addition, at or about the time these statements were made, Magma already
8 was using the inventions and information from the confidential patent applications drafted for
9 Synopsys (and information contained in at least one confidential Synopsys white paper).

10 37. In 1998, I was interviewed by an individual named Marios Papaefthymiou, who I
11 understood had been tasked with determining the extent to which Magma employees had used
12 information from my prior employers. Neither Magma, to my knowledge, nor I informed Mr.
13 Papaefthymiou of the fact that Magma’s patent applications contained Synopsys’ inventions and
14 confidential information.

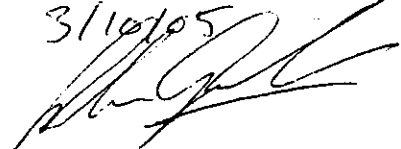
15 38. From 1997 to the present, Magma has prosecuted patent applications disclosing
16 inventions owned by Synopsys and using the same language that also is contained in Synopsys
17 confidential documents. These applications include the applications that ultimately issued as the
18 ‘446 Patent and ‘438 Patent.

19 39. In a declaration signed by me on or about May 4, 1998, and submitted to the Patent
20 and Trademark Office by Magma, I represented under oath that I was the “original, first and sole
21 inventor” of the inventions claimed in the ‘446 Patent.

22 40. In a declaration signed by me on or about July 1, 1997, I represented under oath to the
23 United States Patent and Trademark Office that Narendra Shenoy and I were the original, first, and
24 sole inventors of the inventions disclosed in the ‘114 Patent.

25 41. Though I conceived the Inventions while employed at Synopsys, the Inventions were
26 not implemented by Synopsys or the Synopsys-IBM joint development team before I resigned from
27 Synopsys.

28 42. The Inventions were conceived by myself during my employment for Synopsys for

3110705


1 the purpose of developing Synopsys' products.

2 43. I understand that on or about April 23, 2002, Patent No. 6,378,114, entitled "Method
3 for the Physical Placement of an Integrated Circuit Adaptive to Netlist Changes," was issued to
4 Synopsys. I am a named inventor on the '114 Patent.

5 44. I understand that on or about September 17, 2002, the '446 Patent, entitled "Timing
6 Closure Methodology," was issued to Magma. The '446 Patent discloses inventions which I
7 conceived while employed at Synopsys.

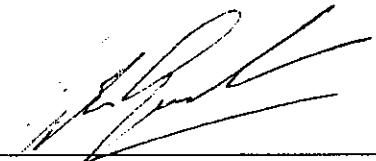
8 45. I understand that on or about April 20, 2004, the '438 Patent, entitled "Timing
9 Closure Methodology," was issued to Magma. The '438 Patent discloses inventions which I
10 conceived while employed at Synopsys.

11 46. I breached my obligations to Synopsys under the Agreement by, among other things,
12 (a) failing to keep proprietary information of Synopsys in trust and confidence, and (b) using and
13 disclosing Synopsys' proprietary information to and on behalf of Magma without the written consent
14 of Synopsys.

15 47. Without waiving any attorney client privilege, I confirm that I am signing this
16 Declaration of my own free will, after having consulted with my counsel regarding the nature,
17 purpose and effect of this Declaration.

18 I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF
19 CALIFORNIA AND THE UNITED STATES OF AMERICA THAT ALL OF THE FOREGOING
20 STATEMENTS AND FACTS CONTAINED HEREIN ARE TRUE AND CORRECT.

21 Dated: March 10, 2005

22 
23 _____ 3/10/05
24 Lukas van Ginneken

25
26
27
28