

UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA

HONEYWELL INTERNATIONAL, INC.,

Plaintiff,

v.

NEST LABS, INC.,  
BEST BUY CO., INC.,  
BEST BUY STORES, L.P., and  
BESTBUY.COM, LLC,

Defendants.

Civil Action No. 0:12-cv-00299 SRN-JSM

**NEST LABS, INC.’S ANSWER TO  
AMENDED COMPLAINT,  
COUNTERCLAIMS, AND  
DEMAND FOR JURY TRIAL**

Defendant Nest Labs, Inc. (“Nest Labs”) files this Answer to plaintiff Honeywell International, Inc.’s (“Honeywell’s”) Amended Complaint and respectfully answers Honeywell’s allegations as follows:

This lawsuit is a bald effort by Honeywell to inhibit competition from a promising new company and product in a field that Honeywell has dominated for decades. Nest Labs, with its Nest Learning Thermostat, has generated consumer and critical enthusiasm around the home thermostat—a device that most people had long since written off as a bland, dumb appliance. No less than the *New York Times*, *Wall Street Journal*, and *USA Today* have lauded the Nest Learning Thermostat as “gorgeous, elegant and very, very smart”; “intuitive ... sophisticated ... [and] right on the money”; and “hot”—unlike “the thermostat on your wall [that] is probably a blah-looking controller you face only when it's time to warm or cool the house.”

That “blah-looking controller” on the market today is very often from Honeywell, which has long dominated the thermostat market, but has yet to generate a device that offers ordinary consumers as much as the Nest Learning Thermostat. Instead of countering product innovation

with its own new products, Honeywell has a track record of responding to innovation with lawsuits and overextended claims of intellectual property violations. Indeed, in a prior intellectual property case Honeywell brought, the court noted that, “whenever Honeywell learned that a competitor was selling or planned to sell a round thermostat, it responded with threats of expensive litigation, and it managed to eliminate the competing design either by settlements or by buying the competitor outright.” *Eco Mfg. LLC v. Honeywell Int’l, Inc.*, 295 F. Supp. 2d 854, 867 (S.D. Ind. 2003). Honeywell lost that case because the court found that its intellectual property was invalid.

Honeywell’s patents in this case are no better. Nest does not use the Honeywell patents; but even if the patents covered what Honeywell alleges, they are hopelessly invalid. They are retreads—already invented by others years before, and in some cases by other teams at Honeywell that Honeywell hid from the Patent Office when pursuing the patents in this lawsuit. For example, Honeywell’s ‘958 patent on remotely controlling temperature setpoints marks no difference from a prior art Honeywell patent (U.S. Patent 4,657,179) that expired in early 2004. Honeywell’s ‘988 patent on power stealing is also indistinguishable from another of its own patents (U.S. Patent 5,736,795) filed years earlier. Moreover, Honeywell’s idea for displaying temperature setpoints on an LCD inside a rotating ring, as shown in its ‘899 patent-in-suit, was implemented years earlier by employees of Volkswagen who ultimately abandoned their own patent application because a search found dead-on prior art. And one doesn’t need an exhaustive literature search to conclude that Honeywell’s ‘504 patent on presenting a user of an HVAC controller with “complete grammatical sentences” is not worthy of a patent, though a quick search does turn up prior U.S. Patent 5,065,813, which confirms that the ‘504 patent is invalid.

As set out more fully below in paragraphs 137-177, Honeywell's suit is a misuse of intellectual property intended to harass Nest Labs and interfere with its commercial activities and relationships. Consistent with Honeywell's pattern of past behavior, Honeywell's motives are clear from a review of the merits and scope of the patents selected by Honeywell. Honeywell wants to use this lawsuit to scare a new competitor—and its customers, retailers and installers—out of what Honeywell believes is its space. But it will not work.

Nest Labs answers Honeywell's Amended Complaint here as a first step in establishing the invalidity and noninfringement of Honeywell's claims, and intends to follow through to correct the errors that led to the issuance of the Honeywell patents (errors in many cases caused by Honeywell's failure to tell the Patent Office about its own prior art), and to stop, and seek compensation for, Honeywell's latest effort to exclude competition rather than face it honestly in the market.

Nest Labs denies each and every allegation contained in the Amended Complaint, except as hereinafter specifically admitted or explained. To the extent that the headings or any other non-numbered statements, or any figures, annotation of figures, or arrangements of figures in Honeywell's Amended Complaint contain any allegations, Nest Labs denies each and every allegation therein, except as hereinafter specifically admitted or explained.

1. Nest Labs denies that Honeywell is an innovator in the area of thermostat technology. Nest Labs admits that Honeywell purports to own certain patents. Nest Labs admits that it recently began manufacturing, promoting, and selling a product called the "Nest Learning Thermostat." Nest Labs admits that it has claimed that the Nest Learning Thermostat has many innovative features developed by Nest Labs. Nest Labs denies that key features of the Nest Learning Thermostat are Honeywell inventions. Nest Labs admits that Defendants Best Buy

Co., Best Buy Stores, and BestBuy.com (collectively, the “Best Buy Defendants”; or, together with Nest Labs, “Defendants”), have promoted, sold, and/or offered to sell the Nest Learning Thermostat. Nest Labs denies that the Defendants have infringed or are infringing any valid claim of the seven patents Honeywell has asserted in this action through their respective activities relating to the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all remaining allegations in paragraph 1 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 1 of the Amended Complaint.

**PARTIES**

2. Nest Labs admits that Honeywell is a corporation that is organized and exists under the laws of the state of Delaware, with a principal place of business in Morristown, New Jersey. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 2 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 2 of the Amended Complaint.

3. Nest Labs admits the allegations of paragraph 3 of the Amended Complaint.

4. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 4 of the Amended Complaint and therefore denies them.

5. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 5 of the Amended Complaint and therefore denies them.

6. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 6 of the Amended Complaint and therefore denies them.

7. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 7 of the Amended Complaint and therefore denies them.

8. Nest Labs admits that the website [www.bestbuy.com](http://www.bestbuy.com) has indicated that the Nest Thermostat is sold out online, and that the website has indicated that in-store pickup is “coming soon.” Nest Labs admits that installation of the Nest Learning Thermostat through a service known as “Geek Squad” has been made available at three Best Buy store locations through one or more of the Best Buy Defendants. Nest Labs admits that a copy of Best Buy Co.’s April 25, 2011 Form 10-K available on the internet contains the quote Honeywell attributes to it. Nest Labs denies that the Best Buy Defendants, alone or in conjunction with any other entities, infringe or have infringed any valid claim of the seven patents Honeywell has asserted in this action through joint promotion, use, sale, offer to sell, and/or importation of the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all remaining allegations in paragraph 8 of the Amended Complaint and therefore denies them.

#### **JURISDICTION AND VENUE**

9. Nest Labs admits that paragraph 9 of the Amended Complaint purports to state a cause of action under the patent laws of the United States, 35 U.S.C. §1, *et seq.* Nest Labs denies any and all remaining allegations of paragraph 9 of the Amended Complaint.

10. Nest Labs admits that paragraph 10 of the Amended Complaint purports to state a cause of action over which this Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a). Nest Labs denies any and all remaining allegations of paragraph 10 of the Amended Complaint.

11. Nest Labs does not dispute that this Court has personal jurisdiction over Nest Labs. Nest Labs admits that it transacts business in Minnesota, that it has specifically directed its business activities to Minnesota, and that it has sold the Nest Learning Thermostat in Minnesota. Nest Labs denies that any of its activities in or beyond Minnesota have infringed any valid claim of the patents Honeywell has asserted in this action, or caused harm to Honeywell in Minnesota. Nest Labs denies any and all remaining allegations of paragraph 11 of the Amended Complaint.

12. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 12 of the Amended Complaint and therefore denies them.

13. In response to paragraph 13 of the Amended Complaint, Nest Labs admits, for the purpose of this action only, that venue is proper in this judicial district.

#### **BACKGROUND TO THE ACTION**

14. Nest Labs admits that a thermostat can be a portion of a heating, ventilation, air conditioning (“HVAC”) system. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegations in paragraph 14 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 14 of the Amended Complaint.

15. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 15 of the Amended Complaint and therefore denies them.

16. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 16 of the Amended Complaint and therefore denies them.

17. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the allegations in paragraph 17 of the Amended Complaint and therefore denies them.

**THE ASSERTED PATENTS**

18. In response to paragraph 18 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,634,504 (“the ‘504 Patent’”) states on its face that the patent was issued on December 15, 2009. Nest Labs admits that on its face the ‘504 patent is entitled “Natural Language Installer Setup for Controller.” Nest Labs admits that on its face the ‘504 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘504 patent was attached to Honeywell’s Amended Complaint as Exhibit 1. Nest Labs denies any and all remaining allegations of paragraph 18.

19. In response to paragraph 19 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,142,948 (“the ‘948 Patent’”) states on its face that the patent was issued on November 28, 2006. Nest Labs admits that on its face the ‘948 patent is entitled “Controller Interface with Dynamic Schedule Display.” Nest Labs admits that on its face the ‘948 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘948 patent was attached to Honeywell’s Amended Complaint as Exhibit 2. Nest Labs denies any and all remaining allegations of paragraph 19.

20. In response to paragraph 20 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 6,975,958 (“the ‘958 Patent’”) states on its face that the patent was issued on December 13, 2005. Nest Labs admits that on its face the ‘958 Patent is entitled “Profile Based Method for Deriving a Temperature Setpoint Using a ‘Delta’ Based on Cross-Indexing a Received Price-Point Level Signal.” Nest Labs admits that on its face the ‘958 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘958 patent was attached to Honeywell’s Amended Complaint as Exhibit 3. Nest Labs denies any and all remaining allegations of paragraph 20.

21. In response to paragraph 21 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,584,899 (“the ‘899 Patent”) states on its face that the patent was issued on September 8, 2009. Nest Labs admits that on its face the ‘899 Patent is entitled “HVAC Controller.” Nest Labs admits that on its face the ‘899 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘899 patent was attached to Honeywell’s Amended Complaint as Exhibit 4. Nest Labs denies any and all remaining allegations of paragraph 21.

22. In response to paragraph 22 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,159,789 (“the ‘789 Patent”) states on its face that the patent was issued on January 9, 2007. Nest Labs admits that on its face the ‘789 Patent is entitled “Thermostat with Mechanical User Interface.” Nest Labs admits that on its face the ‘789 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘789 patent was attached to Honeywell’s Amended Complaint as Exhibit 5. Nest Labs denies any and all remaining allegations of paragraph 22.

23. In response to paragraph 23 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,159,790 (“the ‘790 Patent”) states on its face that the patent was issued on January 9, 2007. Nest Labs admits that on its face the ‘790 Patent is entitled “Thermostat with Offset Drive.” Nest Labs admits that on its face the ‘790 patent lists “Honeywell International Inc.” as the assignee. Nest Labs admits that a copy of the ‘790 patent was attached to Honeywell’s Amended Complaint as Exhibit 6. Nest Labs denies any and all remaining allegations of paragraph 23.

24. In response to paragraph 24 of the Amended Complaint, Nest Labs admits that the title page of United States Patent No. 7,476,988 (“the ‘988 Patent”) states on its face that the



patent was issued on January 13, 2009. Nest Labs admits that on its face the '988 Patent is entitled "Power Stealing Control Devices." Nest Labs admits that on its face the '988 patent lists "Honeywell International Inc." as the assignee. Nest Labs admits that a copy of the '988 patent was attached to Honeywell's Amended Complaint as Exhibit 7. Nest Labs denies any and all remaining allegations of paragraph 24.

25. Paragraph 25 of the Amended Complaint does not contain any factual allegations.

**ACTS GIVING RISE TO THE ACTION**

26. Nest Labs admits that it has engaged in the use, importation, offer for sale, and sale of the Nest Learning Thermostat in the United States, and admits that it has offered for sale and sold the Nest Learning Thermostat in this judicial district, but otherwise denies the allegations of the first sentence of paragraph 26 of the Amended Complaint. Nest Labs admits the allegations of the second sentence of paragraph 26, with the exception of the October 28, 2011 date alleged for the date that pre-sales of the Nest Learning Thermostat began. Those pre-sales began on October 25, 2011. Nest Labs admits that individuals and/or entities in Minnesota have purchased the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 26 of the Amended Complaint and therefore denies them.

27. Nest Labs admits the allegations of paragraph 27 of the Amended Complaint.

28. In response to paragraph 28 of the Amended Complaint, Nest Labs admits that the Nest Learning Thermostat has been sold on-line through the BestBuy.com website. Nest Labs admits that the Nest Learning Thermostat has been featured in the Home Energy Management section of one Best Buy Store in San Carlos, California; one in Chicago, Illinois; and one in Houston/Willowbrook, Texas. Nest Labs admits that those three stores had display materials for

the Nest Learning Thermostat, including a thermostat, written materials, and a video. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 28 of the Amended Complaint and therefore denies them.

29. In response to paragraph 29 of the Amended Complaint, Nest Labs admits that the [www.bestbuy.com](http://www.bestbuy.com) website has been linked to content made available by Nest Labs, including video and other materials relating to the Nest Learning Thermostat. Nest Labs admits that installation of the Nest Learning Thermostat through the “Geek Squad” service has been offered in the San Carlos, California; Chicago, Illinois; and Houston/Willowbrook, Texas Best Buy Store locations. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 29 of the Amended Complaint and therefore denies them.

30. Nest Labs admits the allegations of paragraph 30 of the Amended Complaint.

31. In response to paragraph 31 of the Amended Complaint, Nest Labs admits that its marketing materials have referred to the ease of use of the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 31 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 31 of the Amended Complaint.

32. In response to paragraph 32 of the Amended Complaint, Nest Labs admits that its promotional materials have referred to aspects of the operation of the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 32 of the Amended Complaint and therefore denies them.

Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 32 of the Amended Complaint.

33. In response to paragraph 33 of the Amended Complaint, Nest Labs admits that its promotional materials have referred to aspects of the operation of the Nest Learning Thermostat. Nest Labs admits that its promotional materials have referred to a feature called “Time to Temperature.” Nest Labs admits that a document that was available on the Nest Labs website recited “Time to Temperature” and “Tells you how long it will take to reach your target temperature.” Nest Labs admits that a video relating to the Nest Learning Thermostat has been available on its website, and that a similar video has been available via youtube.com and bestbuy.com. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 33 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 33 of the Amended Complaint.

34. In response to paragraph 34 of the Amended Complaint, Nest Labs admits that its promotional materials have referred to the ability of the Nest Learning Thermostat to communicate on the internet and a feature called a “Nest Account.” Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 34 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 34 of the Amended Complaint.

35. In response to paragraph 35 of the Amended Complaint, Nest Labs admits that its promotional materials have referred to a ring-like bezel feature of the Nest Learning Thermostat. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the

remaining allegations in paragraph 35 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 35 of the Amended Complaint.

36. In response to paragraph 36 of the Amended Complaint, Nest Labs admits that its promotional materials have referred to “power-stealing.” Nest Labs admits that an article available on the internet quoted Mr. Fadell as stating that “our competitors can’t make low-power devices.” Nest Labs admits that a page on its website recited “A red LED is flashing below Nest’s display” and contained the quote Honeywell attributes to it. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of the remaining allegations in paragraph 36 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 36 of the Amended Complaint.

37. Nest Labs admits that Mr. Fadell and Mr. Rogers have made public statements regarding the Nest Learning Thermostat. Nest Labs admits that an article on the internet attributed the following quote, which Honeywell appears to have mis-quoted, to Mr. Fadell: “Thermostats are made by very large companies with no incentive to innovate.” Nest Labs admits that an article available on the internet attributed the quote “there’s been no real innovation in decades” to Mr. Fadell. Nest Labs admits that an article available on the internet attributed the quote “Honeywell is not doing enough; we could do much better” to Mr. Rogers. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegation in paragraph 37 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 37 of the Amended Complaint.

38. Nest Labs admits that paragraph 38 of the Amended Complaint purports to show a picture of the Kohler Mira Platinum Wireless Controller. Nest Labs admits that Kohler Mira Platinum documentation accessed on April 6, 2012, made a claim to Design Registration No. 001065023-0003. Nest Labs denies the suggestion that it derived its design from other parties, and/or specifically from the Mira Platinum Wireless Shower product. Nest Labs denies any and all remaining allegations in paragraph 38 of the Amended Complaint or in the figures accompanying paragraph 38. Nest Labs denies any further characterizations and inferences Honeywell seeks to draw from its statements in paragraph 38 of the Amended Complaint or from the figures accompanying paragraph 38.

39. In response to paragraph 39 of the Amended Complaint, Nest Labs denies that Honeywell is an innovator in the area of thermostat technology or that Honeywell owns valid and enforceable patents that cover key functional features at the core of the Nest Learning Thermostat. Nest Labs denies the suggestion that it derived the key functional features at the core of the Nest Learning Thermostat from Honeywell. Nest Labs admits that a document accessed on April 6, 2012 at the webpage cited by Honeywell in paragraph 39 of its Amended Complaint was on its face entitled “Frost & Sullivan: Honeywell Chosen by Consumers as the Overall Best Brand of Programmable Thermostats in the United States.” Nest Labs admits that on its face, the article was dated September 14, 2011. Nest Labs denies any and all remaining allegations in paragraph 39 of the Amended Complaint. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 39 of the Amended Complaint.

40. Nest Labs denies the allegations in paragraph 40 of the Amended Complaint. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from the

allegations of paragraph 40 or the figures that accompany paragraph 40 of the Amended Complaint.

41. Nest Labs lacks sufficient knowledge and information to form a belief as to the allegations contained in the first sentence of paragraph 41 of the Amended Complaint and therefore denies them. Nest Labs admits that on April 6, 2012, the article available at <http://www.tested.com/news/how-the-nest-actually-differs-from-othersmart-thermostats/3067/> contained the quote Honeywell attributes to it. Nest Labs admits that on April 6, 2012, the article available at the web address cited for the quote in the third sentence of paragraph 41 contained the following quote, which was apparently mis-quoted by Honeywell: “their Prestige™ programmable thermostat incorporates a patented, interview-based interface that walks a homeowner through the set-up process by asking a series of questions, such as ‘what time does the first person wake-up in the morning?’ or ‘what time do you go to sleep at night?’ The answers help the thermostat program itself – no owner’s manual is needed. The graphic user interface displays information in an easy-to-understand format, the on-board user’s manual provides definitions and directions for each display screen and can be customized to display in English, French or Spanish.” Nest Labs denies any and all remaining allegations in paragraph 41 of the Amended Complaint. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 41 of the Amended Complaint.

42. In response to paragraph 42 of the Amended Complaint, Nest Labs admits that users have operated Nest Learning Thermostats. Nest Labs admits that on April 6, 2012, a webpage on the [reviews.bestbuy.com](http://reviews.bestbuy.com) website contained the partial quote that Honeywell quoted in paragraph 42 of the Amended Complaint. Nest Labs lacks sufficient knowledge and information to form a belief as to the remaining allegations contained in paragraph 42 of the

Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 42 of the Amended Complaint

43. Nest Labs denies the allegations in paragraph 43 of the Amended Complaint.

44. In response to paragraph 44 of the Amended Complaint, Nest Labs admits that users have operated Nest Learning Thermostats, and have used the “Time to Temperature” feature. Nest Labs admits that on April 6, 2012, the webpage available at the web address cited in paragraph 44 of Honeywell’s Amended Complaint contained the following text, which Honeywell appears to have mis-quoted in paragraph 44 of the Amended Complaint: “just turned the temp up & my [@nest](#) told me it'd take 25 minutes & stay that temp for the night. i love you, [@nest](#).” Nest Labs lacks sufficient knowledge and information to form a belief as to any remaining allegations contained in paragraph 44 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 44 of the Amended Complaint.

45. In response to paragraph 45 of the Amended Complaint, Nest Labs denies that it infringes any valid intellectual property rights of Honeywell in the ‘958 patent with the Nest Learning Thermostat used in conjunction with a Nest Account. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegations in paragraph 45 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 45 or in the figures that accompany paragraph 45 of the Amended Complaint.

46. In response to paragraph 46 of the Amended Complaint, Nest Labs admits that users have operated Nest Learning Thermostats, and have used Nest Account features. Nest

admits that on April 6, 2012, the following quote, which appears to have been partially quoted by Honeywell in paragraph 46 of the Amended Complaint, could be found on the website [reviews.bestbuy.com](http://reviews.bestbuy.com): “I purchased this thermostat to replace a Filtrete 7-Day Touchscreen WiFi-Enabled Programmable Thermostat which was really hard to use due to its cryptic user interface. Fortunately it has an iPhone app so I used that to change the temperature. The problem was my girlfriend couldn't figure out how to set the temperature. In contrast the Nest is really easy to use and programs itself based on how the user sets the temperature throughout the day. It is a very high quality device compared to other thermostats on the market.” Nest Labs, therefore, denies that Honeywell’s partial quote in paragraph 46 of the Amended Complaint describes the operation of a Nest Learning Thermostat. Nest Labs admits that on April 6, 2012, the webpage available at <http://www.nest.com/2012/02/14/be-our-thermostats-valentine> contained the following text, partially quoted by Honeywell in paragraph 46 of the Amended Complaint: “Loving the [@nest](#) auto-away feature. Out for dinner, just opened Nest app to turn off heat. No need, already taken care of...thx Nest!” Nest Labs lacks sufficient knowledge and information to form a belief as to any remaining allegations contained in paragraph 46 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 46 of the Amended Complaint.

47. In response to paragraph 47 of the Amended Complaint, Nest Labs denies that the Nest Learning Thermostat infringes any valid claim of the ‘899, ‘789, or ‘790 patents. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegations in paragraph 47 of the Amended Complaint and therefore denies them.



48. In response to paragraph 48 of the Amended Complaint, Nest Labs admits that it is not the first to describe circuitry as “power stealing” or to use a circuit referred to as a “power stealing” circuit. Nest Labs denies that the Nest Learning Thermostat infringes any valid claim of the ‘988 patent. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegations in paragraph 48 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 48 of the Amended Complaint.

49. In response to paragraph 49 of the Amended Complaint, Nest Labs admits that it is aware that Honeywell makes thermostats. Nest Labs admits that it is aware that Honeywell purports to own patents. Nest Labs admits that it performed some research regarding thermostats and the thermostat industry, including Honeywell thermostats, before launching a thermostat product. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any remaining allegations in paragraph 49 of the Amended Complaint and therefore denies them. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 49 of the Amended Complaint.

50. Nest Labs admits that the photograph accompanying paragraph 50 of the Amended Complaint was taken at Nest Labs. Nest Labs admits that at least some of the thermostats in the picture were examined by employees of Nest Labs. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any of the annotations added to the photograph by Honeywell, and therefore denies them. Nest Labs admits that some Honeywell thermostats and/or boxes for Honeywell thermostats are shown in the photograph. Nest Labs denies that the T8775C 1005 and T8775A 1009 thermostats that it was able to locate in its possession, their boxes, or their packing materials, were marked with the ‘504 Patent number.

Nest Labs denies that the Honeywell Prestige HD THX9321R5000 thermostat that it was able to locate in its possession after a reasonable search, or the box for that thermostat, was marked with the '504 Patent number. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 50 of the Amended Complaint, from the figure accompanying paragraph 50, or from the annotations on that figure.

51. Nest Labs admits the first sentence of paragraph 51 of the Amended Complaint. Nest Labs admits that it has filed patent applications pursuant to and in accordance with relevant patent laws. Nest Labs denies the remaining allegations of paragraph 51 of the Amended Complaint. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 51 of the Amended Complaint.

52. Nest Labs denies the allegations in paragraph 52 of the Amended Complaint, in the figures that accompany paragraph 52, and in the annotations and/or comments Honeywell added to those figures. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its allegations in paragraph 52 of the Amended Complaint, from the figures accompanying paragraph 52, and from any annotations and/or comments that Honeywell added to those figures.

53. In response to paragraph 53 of the Amended Complaint, Nest Labs admits that it is a funded, sophisticated start-up company. Nest Labs admits that it was aware that Honeywell made thermostats before Nest Labs introduced the Nest Learning Thermostat. Nest Labs denies any and all remaining allegations in paragraph 53 of the Amended Complaint. Nest Labs further denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 53 of the Amended Complaint.

54. Nest Labs admits that it learned about this lawsuit on or around February 6, 2012. Nest Labs denies any and all remaining allegations in paragraph 54, and denies any characterizations and inferences Honeywell seeks to draw from its statements in paragraph 54 of the Amended Complaint.

55. Nest Labs lacks sufficient knowledge and information to form a belief as to the allegations in paragraph 55 of the Amended Complaint and therefore denies them.

**COUNT I: INFRINGEMENT OF THE '504 PATENT**  
**(NEST LABS)**

56. In response to paragraph 56 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 55 above as though fully set forth in this paragraph.

57. Nest Labs denies any and all allegations in paragraph 57 of the Amended Complaint.

58. Nest Labs denies any and all allegations in paragraph 58 of the Amended Complaint.

59. Nest Labs denies any and all allegations in paragraph 59 of the Amended Complaint.

60. Nest Labs denies any and all allegations in paragraph 60 of the Amended Complaint.

**COUNT II: INFRINGEMENT OF THE '948 PATENT**  
**(NEST LABS)**

61. In response to paragraph 61 of the Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 60 above as though fully set forth in this paragraph.

62. Nest Labs denies any and all allegations in paragraph 62 of the Amended Complaint.

63. Nest Labs denies any and all allegations in paragraph 63 of the Amended Complaint.

64. Nest Labs denies any and all allegations in paragraph 64 of the Amended Complaint.

65. Nest Labs denies any and all allegations in paragraph 65 of the Amended Complaint.

**COUNT III: INFRINGEMENT OF THE '958 PATENT**  
**(NEST LABS)**

66. In response to paragraph 66 of the Amended Complaint, Nest Labs realleges its responses as set forth above in paragraphs 1 through 65 above as though fully set forth in this paragraph.

67. Nest Labs denies any and all allegations in paragraph 67 of the Amended Complaint.

68. Nest Labs denies any and all allegations in paragraph 68 of the Amended Complaint.

69. Nest Labs denies any and all allegations in paragraph 69 of the Amended Complaint.

**COUNT IV: INFRINGEMENT OF THE '899 PATENT**  
**(NEST LABS)**

70. In response to paragraph 70 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 69 above as though fully set forth in this paragraph.

71. Nest Labs denies any and all allegations in paragraph 71 of the Amended Complaint.

72. Nest Labs denies any and all allegations in paragraph 72 of the Amended Complaint.

73. Nest Labs denies any and all allegations in paragraph 73 of the Amended Complaint.

74. Nest Labs denies any and all allegations in paragraph 74 of the Amended Complaint.

**COUNT V: INFRINGEMENT OF THE '789 PATENT**  
**(NEST LABS)**

75. In response to paragraph 75 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 74 above as though fully set forth in this paragraph.

76. Nest Labs denies any and all allegations in paragraph 76 of the Amended Complaint.

77. Nest Labs denies any and all allegations in paragraph 77 of the Amended Complaint.

78. Nest Labs denies any and all allegations in paragraph 78 of the Amended Complaint.

79. Nest Labs denies any and all allegations in paragraph 79 of the Amended Complaint.

80. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 80 of the Amended Complaint and therefore denies them.

**COUNT VI: INFRINGEMENT OF THE '790 PATENT**  
**(NEST LABS)**

81. In response to paragraph 81 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 80 above as though fully set forth in this paragraph.

82. Nest Labs denies any and all allegations in paragraph 82 of the Amended Complaint.

83. Nest Labs denies any and all allegations in paragraph 83 of the Amended Complaint.

84. Nest Labs denies any and all allegations in paragraph 84 of the Amended Complaint.

85. Nest Labs denies any and all allegations in paragraph 85 of the Amended Complaint.

86. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 86 of the Amended Complaint and therefore denies them.

**COUNT VII: INFRINGEMENT OF THE '988 PATENT**  
**(NEST LABS)**

87. In response to paragraph 87 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 86 above as though fully set forth in this paragraph.

88. Nest Labs denies any and all allegations in paragraph 88 of the Amended Complaint.

89. Nest Labs denies any and all allegations in paragraph 89 of the Amended Complaint.

90. Nest Labs denies any and all allegations in paragraph 90 of the Amended Complaint.

91. Nest Labs denies any and all allegations in paragraph 91 of the Amended Complaint.

92. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 92 of the Amended Complaint and therefore denies them.

**COUNT VIII: INFRINGEMENT OF THE '504 PATENT**  
**(BEST BUY DEFENDANTS)**

93. In response to paragraph 93 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 92 above as though fully set forth in this paragraph.

94. Nest Labs denies any and all allegations in paragraph 94 of the Amended Complaint.

95. Nest Labs denies any and all allegations in paragraph 95 of the Amended Complaint.

96. Nest Labs denies any and all allegations in paragraph 96 of the Amended Complaint.

97. Nest Labs denies any and all allegations in paragraph 97 of the Amended Complaint.

**COUNT IX: INFRINGEMENT OF THE '948 PATENT**  
**(BEST BUY DEFENDANTS)**

98. In response to paragraph 98 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 97 above as though fully set forth in this paragraph.

99. Nest Labs denies any and all allegations in paragraph 99 of the Amended Complaint.

100. Nest Labs denies any and all allegations in paragraph 100 of the Amended Complaint

101. Nest Labs denies any and all allegations in paragraph 101 of the Amended Complaint.

102. Nest Labs denies any and all allegations in paragraph 102 of the Amended Complaint.

**COUNT X: INFRINGEMENT OF THE '899 PATENT**  
**(BEST BUY DEFENDANTS)**

103. In response to paragraph 103 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 102 above as though fully set forth in this paragraph.

104. Nest Labs denies any and all allegations in paragraph 104 of the Amended Complaint.

105. Nest Labs denies any and all allegations in paragraph 105 of the Amended Complaint.

106. Nest Labs denies any and all allegations in paragraph 106 of the Amended Complaint.



107. Nest Labs denies any and all allegations in paragraph 107 of the Amended Complaint.

**COUNT XI: INFRINGEMENT OF THE '789 PATENT**  
**(BEST BUY DEFENDANTS)**

108. In response to paragraph 108 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 107 above as though fully set forth in this paragraph.

109. Nest Labs denies any and all allegations in paragraph 109 of the Amended Complaint.

110. Nest Labs denies any and all allegations in paragraph 110 of the Amended Complaint.

111. Nest Labs denies any and all allegations in paragraph 111 of the Amended Complaint.

112. Nest Labs denies any and all allegations in paragraph 112 of the Amended Complaint.

113. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 113 of the Amended Complaint and therefore denies them.

**COUNT XII: INFRINGEMENT OF THE '790 PATENT**  
**(BEST BUY DEFENDANTS)**

114. In response to paragraph 114 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 113 above as though fully set forth in this paragraph.

115. Nest Labs denies any and all allegations in paragraph 115 of the Amended Complaint.

116. Nest Labs denies any and all allegations in paragraph 116 of the Amended Complaint.

117. Nest Labs denies any and all allegations in paragraph 117 of the Amended Complaint.

118. Nest Labs denies any and all allegations in paragraph 118 of the Amended Complaint.

119. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 119 of the Amended Complaint and therefore denies them.

**COUNT XIII: INFRINGEMENT OF THE '988 PATENT**  
**(BEST BUY DEFENDANTS)**

120. In response to paragraph 120 of the Amended Complaint, Nest Labs realleges its responses as set forth in paragraphs 1 through 119 above as though fully set forth in this paragraph.

121. Nest Labs denies any and all allegations in paragraph 121 of the Amended Complaint.

122. Nest Labs denies any and all allegations in paragraph 122 of the Amended Complaint.

123. Nest Labs denies any and all allegations in paragraph 123 of the Amended Complaint.

124. Nest Labs denies any and all allegations in paragraph 124 of the Amended Complaint.

125. Nest Labs lacks sufficient knowledge and information to form a belief as to the truth of any and all allegations in paragraph 125 of the Amended Complaint and therefore denies them.

**RESPONSE TO PRAYER FOR RELIEF**

Nest Labs denies that Honeywell is entitled to any form of relief, and respectfully requests that the Court deny Honeywell any and all of the relief it seeks from the Court in each of the paragraphs of its Prayer for Relief.

**AFFIRMATIVE DEFENSES**

Further Answering the Amended Complaint, Nest Labs asserts the following defenses. In addition to the affirmative defenses described below, Nest Labs specifically reserves the right to amend its Answer to allege any additional affirmative defenses as they become known through the course of discovery.

**First Affirmative Defense: Failure to State a Claim**

126. Honeywell's Amended Complaint fails to state any claim upon which relief can be granted.

**Second Affirmative Defense: Non-Infringement**

127. Nest Labs and/or the Best Buy Defendants have not infringed and do not infringe, directly, contributorily or by inducement, willfully or otherwise, any valid claim of the '504 patent, the '948 patent, the '958 patent, the '899 patent, the '789 patent, the '790 patent, or the '988 patent, and are not liable for infringement thereof.

**Third Affirmative Defense: Invalidity of the Asserted Patents**

128. At least one claim of each of the '504 patent, the '948 patent, the '958 patent, the '899 patent, the '789 patent, the '790 patent, and the '988 patent is invalid for failing to comply

with one or more provisions of the Patent Act (35 U.S.C §§ 101 et seq., including §§ 101, 102, 103, and 112), and/or under the doctrine of obviousness-type double patenting.

**Fourth Affirmative Defense: Prosecution History Estoppel / Disclaimer**

129. Honeywell is estopped, based on statements, representations and admissions made during the prosecution of the patent applications resulting in the patents-in-suit, from asserting any construction of any of the claims of the patents-in-suit that contradicts or is inconsistent with arguments made during the prosecution of the '504 patent, the '948 patent, the '958 patent, the '899 patent, the '789 patent, the '790 patent, and the '988 patent and/or any related patents.

**Fifth Affirmative Defense: Unclean hands**

130. Honeywell's claims for relief are barred and unenforceable, in whole or in part, on the ground that Honeywell has unclean hands with respect to the matters alleged therein.

**Sixth Affirmative Defense: Unenforceability**

131. Honeywell's claims for relief are barred and unenforceable, in whole or in part, due to patent misuse and/or bad faith enforcement of any or all of the patents asserted in this action.

**COUNTERCLAIMS**

In support of its Counterclaims, Defendant and Counterclaimant Nest Labs, Inc. alleges as follows:

**THE PARTIES**

132. Counterclaimant Nest Labs, Inc. ("Nest Labs") is a Delaware corporation, with its principal place of business in Palo Alto, California.

133. On information and belief, counterclaim defendant Honeywell International, Inc. (“Honeywell”), is a corporation organized and existing under the laws of the state of Delaware, with its principal place of business in Morristown, New Jersey.

**JURISDICTION AND VENUE**

134. This action arises under the patent laws of the United States, Title 35 U.S.C. § 1 et seq. and the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. This Court has subject matter jurisdiction under 28 U.S.C. §§1331 and 1338(a).

135. Upon information and belief, this Court has personal jurisdiction over Honeywell at least because Honeywell has purposely availed itself of the privilege of conducting activities within this state and district. Upon information and belief, a division of Honeywell is located in Golden Valley, Minnesota. Further, Honeywell has consented to personal jurisdiction by commencing an action for patent infringement in this district, as set forth in Honeywell’s Amended Complaint.

136. Upon information and belief, venue is proper in this Court pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400 because Honeywell is subject to personal jurisdiction in this judicial district and has commenced an action for patent infringement in this District.

**SUMMARY OF COUNTERCLAIM CASE**

137. Honeywell’s lawsuit against Nest Labs is only the latest example of Honeywell’s repeated attempts to protect its dominance in a thermostat field that has not kept up with the digital revolution that has transformed other areas of consumer and home electronics. When faced with the threat of a new entrant’s innovative products, Honeywell does not compete on the merits, but retreats to the courthouse to overextend its intellectual property in an effort to intimidate and raise the costs of lawful competitors. On information and belief, Honeywell has a long history of bringing litigation against other companies, or purchasing other companies to

remove them, when they participate and innovate in the electronic thermostat field or other fields dominated by Honeywell. Honeywell's patent claims are without merit and betray Honeywell's true intentions, which are, on information and belief, to disrupt and unsettle a promising new entrant that is bringing innovation and vitality to a field long monopolized by Honeywell.

**Nest Labs' Learning Thermostat is New, Innovative, and Disruptive**

138. Nest Labs was founded by Tony Fadell and Matt Rogers. Over a nine-year career at Apple, Inc., Tony worked on the first 18 generations of the iPod and the first three generations of the iPhone, as Senior Vice President of the iPod Division, and Advisor to the CEO. Matt led a staff of 30 engineers responsible for iPod software development at Apple, from concept to production. In May 2010, Tony and Matt co-founded Nest Labs to leverage their knowledge and experience in modern consumer devices, to develop a pleasing, intuitive, and easy-to-use thermostat that home users would enjoy using, and at the same time, could help those customers reduce energy costs. The first product of that collaboration is the Nest Learning Thermostat.

139. The first thing people notice about the Nest Learning Thermostat is its sleek and minimalist design. Unlike so many thermostats before it, this device bespeaks quality and functionality:



140. Like all good product design, the simple exterior of the Nest Learning Thermostat masks a lot of complex engineering and innovation that make the product very easy to use and intuitive. The Nest Learning Thermostat has embedded wireless communications, a high quality LCD display for content-rich menus, multiple sensors to track household environmental conditions, and many other features that make it more like a special purpose computer than a traditional thermostat. A user can easily provide programming input to the thermostat by rotating the ring-like bezel to make selections and by pressing the thermostat's display like clicking a computer mouse.

141. In addition to its sophisticated design and engineering, the Nest Learning Thermostat is smart. While a user can provide a heating or cooling schedule manually to the Nest Learning Thermostat, the thermostat can also automatically learn a schedule using artificial intelligence algorithms. These algorithms rely on motion sensors that tell the thermostat when inhabitants are typically home and away—and it can automatically drop (for heating) or raise (for cooling) a setpoint temperature when they've been away for a few hours. As a positive reinforcement tool, the Nest Learning Thermostat displays a green leaf (shown above) when the programming will save energy. The Nest Learning Thermostat also displays a history of energy usage, and indicates whether energy use was most affected by the owner's temperature adjustments, the auto-away feature, or by the weather.

142. Users of the Nest Learning Thermostat may also set up and use the Nest Web app, a web-based interface that permits users to monitor and control their energy consumption remotely. Such users may also use a mobile app with Android- and Apple-based mobile devices like smartphones and tablet computers.

143. The Nest Learning Thermostat was designed with a home user in mind. Unlike traditional programmable thermostats that are primarily marketed to and purchased by expert home builders and HVAC professionals, the Nest Learning Thermostat is truly a consumer electronic device. It comes out-of-the-box with a number of features designed for an ordinary home owner to install it herself or himself:



Just as importantly, it is programmed to adjust automatically to different wiring schemes in different regions and homes, and to operate, with all its advanced features, even in homes that do not have a dedicated power line to the existing thermostat (a so-called “common wire” or “c-wire”)—which includes a large majority of the homes in the country. These features allow the very advanced Nest Learning Thermostat to be sold to all sorts of consumers, right from a store shelf, to be enjoyed by a typical do-it-yourselfer with very little effort.

144. Unlike traditional thermostats for the home market, the Nest Learning Thermostat is designed top-to-bottom to provide users with fully-integrated, easy-to-use, and complete control over their heating and cooling environment, and the 50% of their energy bills related to heating and cooling. The Nest Learning Thermostat is a truly disruptive product in the previously-sleepy thermostat field.



**Consumer and Journalistic Response to the Nest Learning Thermostat Has Been Overwhelmingly Positive**

145. Nest Labs made the first unrestricted public announcement of the Nest Learning Thermostat on October 25, 2011.

146. In a review dated November 30, 2011, New York Times technology columnist David Pogue lauded the Nest Learning Thermostat as “gorgeous, elegant and very, very smart. It will keep your house at the right temperature, save you money and do some good for the planet. Put another way, it can make you comfortable in more ways than one.” <http://tinyurl.com/d64rdm>. Mr. Pogue noted that the Nest Learning Thermostat “doesn’t introduce just one radical rethinking of the thermostat; it introduces four of them.”

- “The look” of the Nest Learning Thermostat is “RADICAL CHANGE 1,” including its screen of “slightly domed glass,” its barrel with “a mirror finish that reflects your wall,” its color screen that “glows orange when it’s heating, blue when it’s cooling,” and the way “it turns on when you approach it, and discreetly goes dark when nobody’s nearby.”
- Mr. Pogue described the Nest Learning Thermostat’s online features as “RADICAL CHANGE 2,” including the ability to “download software updates,” “program it on a Web site,” and the way “You can also use a free iPhone or Android app, from anywhere you happen to be, to see the current temperature and change it — to warm up the house before you arrive, for example. (At this moment, vacation-home owners all over the world are wiping drool off their keyboards.)”
- The Nest Learning Thermostat’s “Learning” features were “RADICAL CHANGE 3,” including the way that “Over the course of a week or so, the thermostat learns from your manual adjustments. It notes when that happened, and what the temperature and humidity were, and so on. And it begins to set its own schedule based on your living patterns.”
- “Energy savings” with the Nest Learning Thermostat are “RADICAL CHANGE 4.” These occur through features such as “Auto Away”: “The Nest contains two proximity sensors (near and far), which detect whether anybody is actually in a room. If the sensors decide that nobody’s home, they let the temperature drop or rise to an outer limit you’ve defined — say, 65 in winter, 80 in summer — even if that absence isn’t part of your normal schedule.” And Mr. Pogue lauded the “green leaf” icon that “glows brighter as you turn the ring beyond your standard comfort zone. As a positive-reinforcement technique, it’s a lot more effective than an exhortation from Jimmy Carter to put on a sweater.”

He acknowledged that “there are other learning thermostats with color screens and Internet connections,” but he continued:

[other thermostats] don’t have the sensors that let them self-adjust. They don’t look like pieces of art. They’re sold and packaged for contractors, not humans. And they actually cost more[.]

He reported that the two Nest Learning Thermostats he installed are “now working perfectly and saving me money.” A true and correct copy of Mr. Pogue’s November 30, 2011 review, downloaded from <http://tinyurl.com/d64rdm> on April 6, 2012, is attached hereto as Exhibit A.

147. Just a few weeks earlier, the Wall Street Journal’s Katherine Boehret, partner to esteemed reviewer Walt Mossberg, wrote:

There are few technology products less inspiring than the thermostat. Yet for the past week, I’ve been more captivated by a thermostat than I ever thought possible. . . . Suddenly, I can’t imagine my house without a Nest.

<http://tinyurl.com/3pabqw4>. Ms. Boehret explained that “What makes Nest stand out from other programmable thermostats is that it learns your behavioral patterns and creates a temperature-setting schedule from them. Nest has six sensors that can determine things like when you’re away from home.” She also noted that “its stylish design made of brushed stainless steel is a showpiece.” Ms. Boehret described how:

After two days of use, a message appeared on my Nest saying, ‘Initial heating schedule learning complete.’ . . . If I didn’t agree with any of these learned behaviors, I could tweak the temperatures to my liking, and Nest adjusted to these corrections. After I adjusted the temperature two nights in a row so the house would be cooler when we were sleeping, Nest learned this and automatically adjusted temperatures around 11:30 p.m. We like heat in the morning, so Nest had the heat going when I hopped out of bed.

Ms. Boehret also lauded the green leaf:

[It] appears on the screen if an adjustment you make sets your system into energy-conserving mode relative to your normal behavior. This tiny symbol made me feel like I earned a gold star at school for good behavior.

A true and correct copy of Ms. Boehret's October 26, 2011 review, downloaded from <http://tinyurl.com/3pabqw4> on April 6, 2012, is attached hereto as Exhibit B.

148. In another New York Times review—this one a head-to-head comparison with existing thermostats, including Honeywell's thermostats, by Slate Magazine tech columnist Farhad Manjoo—the Nest Learning Thermostat came out on top:

My favorite of the new thermostats is the Nest. When I saw it, I swooned. A brushed-steel orb that resembles HAL from the film '2001,' the Nest looks like no other thermostat. Also unlike most of them, it promises to learn your temperature preferences, set itself up automatically, and, as your tastes change, strive to keep up.

<http://tinyurl.com/859v3pp>. He described the superior user interface of the Nest Learning Thermostat:

This is the Nest's best feature. Because it was designed by Tony Fadell, who headed the team that created the iPod, the Nest has a wonderfully intuitive user interface that even technophobes will quickly grasp.

You control the device by turning a wheel on its circumference, and you engage its main button by pushing on the face. Don't worry if this sounds complicated; once you touch it, it will be obvious how to use it.

The Nest requires no programming. It has a host of sensors and sophisticated algorithms for learning your temperature preferences. . . . A few days after my installation, the Nest reported that, from my initial manual settings and other sensors, it had learned the family's habits and preferences. It would warm up early in the morning, cool down when my wife and son left for the day, heat up again in the evening, and cool down once more, at bedtime. This analysis was right on the money."

A true and correct copy of Mr. Manjoo's December 7, 2011 review, downloaded from <http://tinyurl.com/859v3pp> on April 6, 2012, is attached hereto as Exhibit C.

149. But there's one more thing. The third national newspaper—USA Today—was equally effusive about the Nest Learning Thermostat in an article titled "Newfangled Nest thermostat is hot," contrasting the Nest Learning Thermostat with "the thermostat on your wall

[that] is probably a blah-looking controller you face only when it's time to warm or cool the house.” USA Today’s “gadget guru” Edward C. Baig stated:

this is the coolest thermostat I've ever come across. Nest smashes any preconceived notions of what a thermostat ought to look like and how it should operate, whether you're in front of it or accessing it remotely from an iPhone or iPad. It takes advantage of cloud computing, and it learns from your behavior. Controlling the temperature and helping you save energy is Nest's primary aim. But you can't help but be drawn to it[.]

<http://tinyurl.com/3wp3v7a>. In the accompanying video, Mr. Baig notes “this isn’t your granddaddy’s thermostat.” A true and correct copy of Mr. Baig’s October 26, 2011 review, downloaded from <http://tinyurl.com/3wp3v7a>, is attached hereto as Exhibit D.

150. With this initial critical reception, it is not surprising that the Nest Learning Thermostat has received significant awards from the top organizations in the field. For example, the Good Housekeeping Research Institute (GHRI)—the foremost consumer products evaluation laboratory in the country—awarded the Nest Learning Thermostat a 2012 Good Housekeeping VIP (Very Innovative Products) Award, an award given to a few products chosen from a pool of thousands, and recognized as “game changers that make life easier, better, and, sometimes, even more fun.” <http://tinyurl.com/857mj9k>. It cited especially the learning features of the Nest Learning Thermostat:

A programmable thermostat reduces your home energy bill by adjusting temperatures to your needs. Only 11% of owners set them correctly, but Nest circumvents that problem: It programs itself. You adjust the dial, as you would on a nonprogrammable unit, and Nest learns these settings (it had our habits down pat in three days). Using sensors, it even figures out when you're home — and not — and adjusts the heat and AC accordingly. You can modify temps and timing remotely from your smartphone, tablet, or Web browser. Plus, it retrieves weather reports via Wi-Fi to check whether the settings are energy-efficient. How cool is that?

<http://tinyurl.com/857mj9k>.

151. The public consumer response was just as enthusiastic. Customers bought up months of supply in the first week of the product's October 25, 2011 launch. <http://tinyurl.com/6gg7du7>.

### **Honeywell – Slow Progress in Thermostat Technology**

152. Honeywell is an industrial behemoth. According to its 2011 Annual Report, its 2011 revenues exceeded \$36 billion. But among its announced “Five Initiatives” that guide the company—“Growth, Productivity, Cash, People, and The Enablers”—there is a notable absence of any goal directed to innovation. <http://tinyurl.com/78vnubs>.

153. In a November 30, 2011, article, New York Times technology columnist David Pogue noted that, before the Nest Learning Thermostat, thermostats were “a tech item that hasn't seen much innovation in decades.” Exhibit A (<http://tinyurl.com/d64rdrm>). And as noted above, USA Today's Edward C. Baig noted that “the thermostat on your wall is probably a blah-looking controller you face only when it's time to warm or cool the house.” Exhibit D (<http://tinyurl.com/3wp3v7a>).

154. According to Honeywell's website, Honeywell introduced its self-described “iconic” round T-86 thermostat in 1953, and “it remains in production today.” <http://tinyurl.com/6n46lmo>. Indeed, Honeywell displays three (3) round thermostat models in a listing of 53 thermostat products on its website—two described as “manual, non-programmable” and one as “digital non-programmable.” <http://tinyurl.com/6vvm6vb>. In seven decades, there appears to be little more technological improvement to the flagship Honeywell thermostat than the replacement of a mechanical display with an LCD display.

155. Outside of its flagship round thermostats, Honeywell has over the years dabbled in thermostats with easy programmability and learning features, but mostly its efforts seem to have been directed toward minimizing the importance or viability of such features, rather than

toward implementing them widely in products. In a recent article, Honeywell's President of Environmental & Combustion Controls, Beth Wozniak, admitted that Honeywell has failed to generate consumer interest in its own form of learning thermostat: "We found that consumers prefer to control the thermostat." <http://tinyurl.com/85ogsqy>. On information and belief, Ms. Wozniak is most likely referring to Honeywell's failed attempts to commercialize the learning thermostat technology described in the now long-expired U.S. Patent 4,335,847 that was invented, not at Honeywell, but by Michael Levine of Quad Six, a company that Honeywell acquired in 1985. (Further information on Honeywell's Quad Six acquisition is set forth in paragraph 159, *infra*). Instead of developing its own software to "create new ways for the home owner to save money on their energy bill," the article explains that Honeywell plans to partner with Opower, which will also be the one "providing the analytics and data to help Honeywell use home and building thermostats for demand response programs."

156. A listing of "programmable" thermostats on Honeywell's website shows only rectangular and square-shaped thermostats—shapes that Honeywell's own website elsewhere characterizes as "chunky, rectangular models." Compare <http://tinyurl.com/6vvm6vb> with <http://tinyurl.com/6n46lmo>. Of 31 programmable models listed on the webpage, 28 have only monochrome screens, and 12 are said to be available only through an HVAC (heating and cooling) professional—including those models with color screens, and the 2 models that are said to connect to the internet. See <http://tinyurl.com/6vvm6vb>.

157. Because of their complexity—both for installation and operation—such 1980s-era programmable thermostats do not maximize energy savings available to their users. A Lawrence Berkeley National Laboratory 2010 paper (with the University of California and the California Institute for Energy and Environment) titled "How People Actually Use Thermostats,"

determined that “today’s modern programmable thermostats (PTs) are complicated and difficult for users to understand, leading to errors in operation and wasted energy.” *See* [http://acs.lbl.gov/~aragon/pubs/ACEEE\\_2010.pdf](http://acs.lbl.gov/~aragon/pubs/ACEEE_2010.pdf) at 1. The study also found that “many occupants used the [programmable thermostat] as an on-off switch and most demonstrated little knowledge of how to operate it.” *Id.* The paper explains “The EnergyStar™ endorsement program for [programmable thermostats], which had been in place since 1995, was recently discontinued in December 2009,” in part because studies have shown that a programmable thermostat alone “did not guarantee reduction in energy consumption, but instead depended on how the device was programmed and controlled by the household.” *Id.* at 4. The paper states that “Many of the complaints and barriers to using [programmable thermostats] are associated with their poor usability.” *Id.* at 5. The authors concluded:

The [programmable thermostat]’s full technical energy savings potential is unlikely to occur and sometimes will result in increased energy consumption. [¶] At the same time, [programmable thermostats] are acquiring new functions and responsibilities, include time-of use response, network connections, and humidity and ventilation controls. We are concerned that these features will be incorporated before the existing ones have been fully integrated and consumers can successfully operate them. Without careful attention to usability, the users will be frustrated and confused, frequently selecting settings that result in unnecessarily high energy consumption.

*Id.* at 9. The paper identifies the Honeywell RTH7600 as a prototypical example of the “modern” type of programmable thermostat discussed in the article. *See id.* at 2.

158. Despite its size and product sprawl, Honeywell’s track record shows that it is more interested in maintaining the status quo in the thermostat field than in bringing new innovations rapidly to consumers.

**Honeywell Responds to Innovative Competitors With Invalid Intellectual Property  
Assertions And Intimidating Behavior**

159. On information and belief, Honeywell has long waited for others to bring innovation to the thermostat field, and then moved to eliminate them. On information and belief, Honeywell's own offerings in programmable thermostats did not originate at Honeywell—they were instead made real by a team led by Michael R. Levine at his company Quad Six, which was selling hundreds of thousands of thermostats in the mid-1980s. On information and belief, Honeywell bought Quad Six in late 1985, thereby eliminating a competitor from the field, and obtaining the Levine group's programmable thermostat technology. *See Eco Mfg. LLC v. Honeywell Int'l, Inc.*, 295 F. Supp. 2d 854, 867 (S.D. Ind. 2003) (“Quad Six was selling a competing round product before Honeywell bought the company to eliminate that competing product”).

160. Honeywell's most public effort to exclude competition in thermostats was its lawsuit against Eco Manufacturing, which was designed to stop Eco from marketing a round thermostat even though Honeywell's patents on such a thermostat had expired decades earlier. According to the federal district court opinion that rejected Honeywell's claims in that case, Honeywell obtained a patent (U.S. Utility Patent 2,394,920) on a round thermostat, which issued in 1946 and expired in or around 1963. *Id.* at 862. Honeywell then obtained a design patent on the round thermostat, and that design patent (D176,657) expired in or around 1970. *Id.* In 1968, with expiration of the design patent approaching, Honeywell filed to protect the shape of the thermostat using trademark law. *Id.* A denial of the trademark application was affirmed by an appeals board that “reasoned that allowing the registration would improperly extend the 14-year monopoly on the design that had been granted in the design patent.” *Id.* Despite repeated denials, Honeywell persisted in trying to extend its monopoly over the round thermostat shape,



and tried again in 1986 to register the shape as a trademark. *Id.* at 864-66. This time the appeals board agreed with Honeywell and approved what became the '108 trademark registration. *Id.* at 864.

161. The federal district court (later affirmed by the U.S. Court of Appeals for the Seventh Circuit at *Eco Mfg. LLC. v. Honeywell Int'l, Inc.*, 357 F.3d 649, 655 (7th Cir. 2003)) ruled that the Board, acting in an *ex parte* proceeding where only Honeywell was available to provide evidence, “made its decision . . . with an incomplete record,” and that, as a matter of law:

The shape of Honeywell's round thermostats cannot be protected by a valid trademark. That round shape was the subject of a long-expired utility patent. Eco and other competitors are entitled to copy that useful and functional shape so long as they do not take other steps to create the impression that their round thermostats are made by or associated with Honeywell.

*Id.* at 886. When Honeywell's utility patent expired in 1963, the public gained “the right to use the circular, convex shape of the Honeywell thermostat. Plaintiff Eco is entitled to do so, using its own trademark and without suggesting that its product is made by or associated with Honeywell.” *Id.* at 858.

162. Importantly, the federal district court in the *Eco Manufacturing* case also found, referring to prior market entry by Penn Controls, Hunter Fan, and Mr. Levine's Quad Six:

[W]henver Honeywell learned that a competitor was selling or planned to sell a round thermostat, it responded with threats of expensive litigation, and it managed to eliminate the competing design either by settlements or by buying the competitor outright. In short, the absence of competing round thermostats—which was the *sine qua non* of the TTAB's decision to reverse its prior decision and allow the '108 registration—was wrong as a matter of fact. Also, the actual small number of competing round thermostats, which the TTAB failed to acknowledge, was itself at best merely an artifact of aggressive lawyering and the intimidating power of Honeywell in the market. The absence certainly did not reflect a lack of interest by competitors or an ability to compete fully without using the round shape.

*Id.* at 867-68.

163. After the *Eco Manufacturing* case, Honeywell was sued in multiple state-court antitrust actions, alleging that Honeywell monopolized markets for electromechanical thermostats and round thermostats, and that Honeywell was able to sell its products at artificially inflated prices. *See In re Circular Thermostat Antitrust Litig.*, No. MDL C05-01673 WHA, 2005 WL 2043022, at \*1 (N.D. Cal. Aug. 24, 2005). The allegations of Honeywell's unlawful conduct included filing a pattern of sham and baseless trademark infringement lawsuits and deceiving the U.S. Patent & Trademark Office. *See id.*

164. Honeywell's conduct to protect its market share and the quiet competitive life it has come to enjoy, however, is not limited to litigation. Aside from purchasing a competitor to eliminate a competing product from the market (as discussed above), Honeywell is alleged to have threatened and coerced rival thermostat manufacturers into not producing competing products, *see id.*, and to have engaged in a "campaign of intimidation" by "referencing the hundreds of patents in [Honeywell's] portfolio" in order to "bully[]" another competitor. *See Honeywell Int'l, Inc. v. Venstar, Inc.*, Case No. 0:11-cv-02779-PJS-JJK, Docket No. 13 (Venstar Motion to Dismiss), at 3-4 (D. Minn. March 2, 2012).

165. On information and belief, Honeywell has a pattern of responding to competitive threats and innovation by spurious legal action and intimidating behavior. Rather than innovate and compete in the marketplace, Honeywell responds to new companies and new products by picking a legal fight with weak intellectual property attacks that are no less expensive to defend against because of their lack of merit, and through other intimidating behavior designed to keep competing and threatening products off the market. This suit is only the latest example of Honeywell's course of conduct against new and innovative market entrants.

**Nest Labs' Announcement Unnerved Honeywell**

166. In his November 30, 2011, review of the Nest Learning Thermostat, New York Times Technology Columnist David Pogue noted:

[T]here are other learning thermostats with color screens and Internet connections. But they don't have the sensors that let them self-adjust. They don't look like pieces of art. They're sold and packaged for contractors, not humans. And they actually cost more: for example, similar models of the Honeywell Prestige and Ecobee Smart Thermostat go for more than \$300 on Amazon.com. (Can you imagine what the arrival of the Nest and its team of former Apple superstars must be doing to morale at those companies? The Friday beer blasts must be a bummer these days.)

Exhibit A (<http://tinyurl.com/d64rdrm>).

167. The announcement of the Nest Learning Thermostat and its critical reception appear to have pushed Honeywell into damage control mode. In a February article in Slate Magazine, Farhad Manjoo reported that it appeared to him that “The thermostat business is getting ugly.” <http://tinyurl.com/6ljo4r7>. He reported on an “unusual visit” to his home last fall by “Pat Tessier, a marketing director at the electronics giant Honeywell,” who had “flown in from Minnesota” with “a P.R. rep, two installation guys, and a big batch of Honeywell products” and was “crestfallen” when Mr. Manjoo, “[u]nprepared for the length and formality of the meeting” and “dressed in a pajama shirt and jeans,” announced that he only had a half hour to meet. “It'll take me a half hour just to tell you about the main unit,” Mr. Tessier is quoted to have said. Mr. Manjoo stated:

In retrospect it's clear why Honeywell put on a full-court press to show me all the ways its thermostat was superior to the Nest. For the first time in years, the thermostat industry was getting covered by the press—but in every story about the Nest, Honeywell was described as a sitting duck.

168. Honeywell CEO Dave Cote was particularly unnerved by the Nest Learning Thermostat's public reception, on information and belief. In a February Fortune Magazine article, titled “Why Honeywell is out to nix Nest,” contributor Richard Nieva stated:

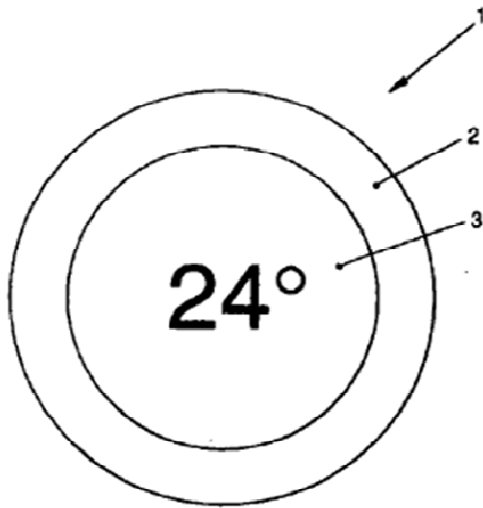
Honeywell has been peeved with the upstart newcomer [Nest Labs] since it started getting major media buzz after it hit stores last fall. When Honeywell's CEO Dave Cote visited *Fortune's* New York City office in January, he countered quickly when I brought up how well the Nest was selling. 'The Nest hasn't sold really well, the *New York Times* has written about it really well,' he shot back. Cote is likely talking about a glowing review by Times technology columnist David Pogue. Another Times piece mentions a handful of new wave thermostats including the Honeywell Prestige HD, but is most enthusiastic about the Nest. Honeywell did not respond to a request for comment.

<http://tinyurl.com/6wdpsw4>.

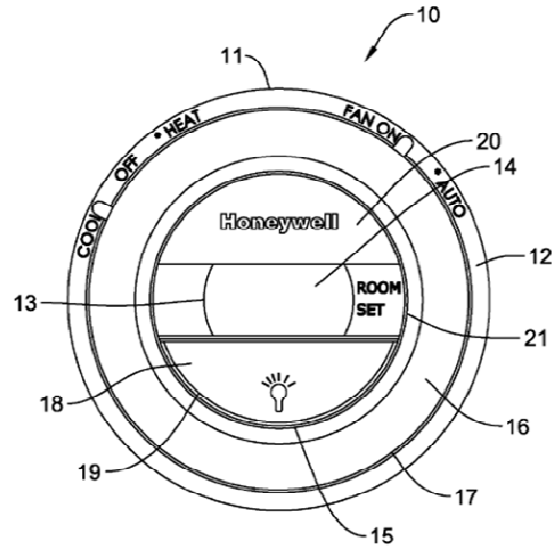
**This Suit Is Another Honeywell Attempt to Overextend its Intellectual Property**

169. On information and belief, Honeywell's suit is intended to harass Nest Labs and interfere with its commercial activities and relationships. Not only is this consistent with Honeywell's pattern of past behavior, but it is also clear from a review of the merits and scope of the patents selected by Honeywell. On information and belief, Honeywell wants to use this lawsuit to scare a new competitor—and its customers, retailers and installers—out of what Honeywell believes is its space.

170. The real character of, and motive behind, Honeywell's suit can be seen in the actual substance of the asserted patents—which re-plow old ground covered by Honeywell and others many years ago, and are not infringed by the Nest Learning Thermostat. For example, although the *Eco Manufacturing* court found round thermostats to be over 50 years old and unprotectable as such, three of Honeywell's asserted patents here relate to round thermostats, including the '899 patent-in-suit, which Honeywell asserts to cover a rotating ring for adjusting setpoint temperature on a central display. Yet that idea was implemented years earlier by engineers at Volkswagen, as illustrated by the image from Volkswagen's patent application (left) compared to the '899 patent (right):



**FIG. 1**



*Figure 1*

**EP 1 065 079 A2**

**US 7,584,899 B2**

A true and correct copy of published European Patent Application EP 1 065 079 A2, downloaded from <http://tinyurl.com/77dv44o>, is attached hereto as Exhibit E.

171. Others of the patents-in-suit are efforts to extend rights in ideas from early, long-expired Honeywell intellectual property—just as in the *Eco Manufacturing* case—and result in misuse of the patent rights via attempts to lengthen patent coverage that, if it were to exist at all, properly expired years ago with the earlier Honeywell patents. For example, the ‘958 patent-in-suit—which Honeywell characterizes as covering “[c]ontrolling a thermostat remotely through the Internet” – is not the first time a Honeywell patent described the idea of remote temperature setpoint adjustment. Specifically, in 1984, Honeywell filed a patent application for a “Distributed Environmental/Load Control System” that had a “communication link” that connected a “communication terminal” to a thermostat and to a control module for an HVAC system. That application, which later issued as U.S. Patent 4,657,179 (now expired), indicates that a user may enter “heat and cool setpoint temperatures, heat and cool temperature

adjustments, and reference temperatures T1, T2, T3, and T4” into the communication terminal, which temperature setpoints and other values “*may be remotely located and connected through telephone lines*” to the rest of the system. See <http://tinyurl.com/6v4xlhb>. The prior Honeywell patent noted:

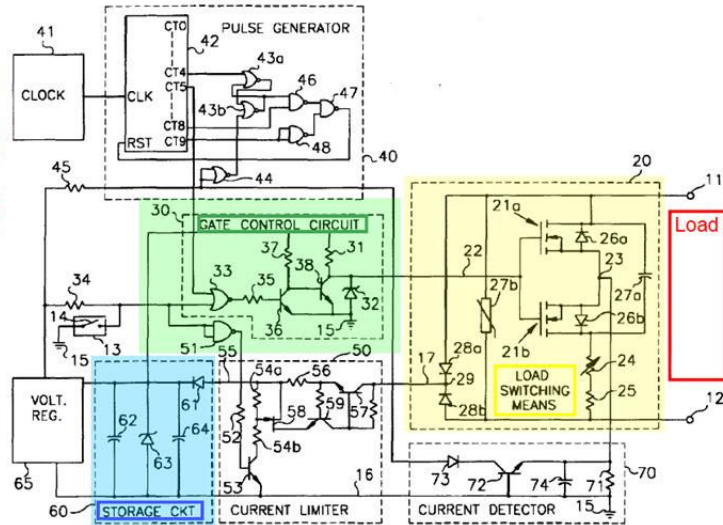
In accordance with the foregoing discussion, the applicants have provided a unique method and apparatus for modifying the control signals supplied to heating and cooling equipment as a function of outdoor temperature or other parameter to achieve energy conservation. The modifications may be made selectively and from a remote location based on energy demand criteria.

*Id.* As with the *Eco Manufacturing* case, Honeywell is trying to extend exclusivity over decades-old ideas and seeks to use those claims to prevent Nest Labs from competing. And Honeywell never even told the Patent Office about its earlier patent when it sought the ‘958 patent-in-suit almost 10 years later. Furthermore, this patent focuses on the transmission of “price” information or information from a “utility,” which Nest Labs does not provide.

172. The ‘988 patent-in-suit—relating to “power stealing”—is another second-pass at an old Honeywell idea. Ten years before that patent’s filing, Honeywell filed for U.S. Patent 5,736,795, titled “Solid State AC Switch with Self-Synchronizing Means for Stealing Operating Power.” <http://tinyurl.com/7klbcf4>. As merely one example of why the ‘988 patent-in-suit is plainly invalid, the circuit of the prior art ‘795 patent and its operation maps directly to claims 13 and 22 of the ‘988 patent-in-suit, as shown in color-coded comparison between those claims and Figure 1 of the prior art patent below:

13. A method for stealing power, comprising:  
 switching power on or off to an electrical load with a switch;  
 conveying power as needed from the switch, when the switch is off and no power is provided to the electrical load, to a storage device; and  
 powering control electronics that control the switching of the switch, at least in part, with the power stored in the storage device.

22. A system for taking power, comprising:  
 a switch for connection between a power source and a load;  
 a conveyance circuit connected to the switch;  
 a storage mechanism connected to the conveyance circuit;  
 a controller connected to the switch; and  
 wherein the controller is powered by the storage mechanism at least some of the time.



And again, Honeywell did not tell the Patent Office about its earlier ‘795 patent when it pursued the ‘988 patent-in-suit.

173. As yet another example, the ‘790 patent-in-suit on a “Thermostat with Offset Drive” recites in claim 1 a “rotatable selector” that can be used to specify a thermostat setpoint, and a “mechanical to electrical translator” having a “rotation axis” that is “offset relative to the [] rotation axis of the rotatable selector.” The translator translates the position of the selector “to an electrical signal that is related to [a] desired parameter value,” in the words of claim 1 in the ‘790 patent. More than 20 years earlier, however, Honeywell filed a patent application for a thermostat having the same features. As shown in Figure 3 below from that patent (U.S. Patent 4,405,080), a “rotatable member 10” has a projection 14 that acts as a “setpoint indicating means”:

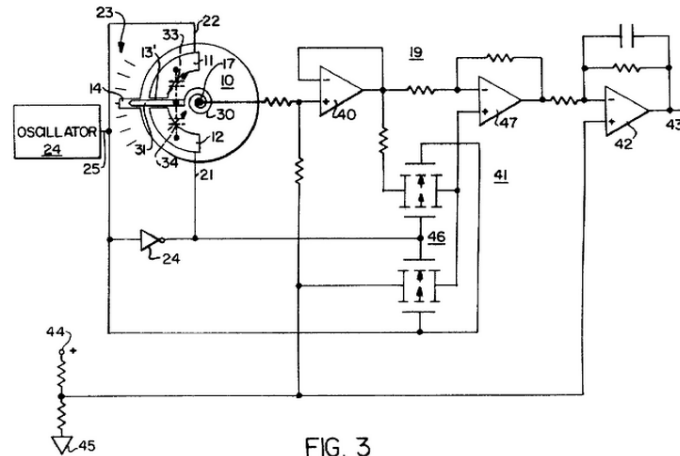


FIG. 3

<http://tinyurl.com/83tjvxx>. A bimetal indicator 31 shows the actual room temperature rather than the setpoint temperature, and two “conductive areas 11 and 12” form a capacitor with the indicator 31, so capacitance changes as the actual temperature moves away from the setpoint cause operation of a furnace or air conditioner to maintain the setpoint. *Id.* The conductive areas, which translate the physical motion into electrical signals, follow a similar path as the item in the Nest Learning Thermostat (a light sensor like that in an optical computer mouse) that identifies adjustments by a user of the thermostat. So, if the Nest Learning Thermostat infringes as Honeywell asserts, the ‘790 patent is invalid over Honeywell’s decades-old prior art—again, prior art that Honeywell did not disclose to the Patent Office when it sought the ‘790 patent. Furthermore, most of the claims of this patent require components such as a potentiometer, or rotating gears and sensors that the Nest Learning Thermostat does not have.

174. The remaining Honeywell patents are retreads of ideas by other parties. For example, Honeywell’s ‘504 patent for a “Natural Language Installer Setup for Controller,” has claims no different than a patent (U.S. Patent 5,065,813) titled “Interactive Electronic Thermostat With Installation Assistance” that was filed 15 years earlier. *See* <http://tinyurl.com/6mo7ywu>. That prior art patent discusses using an LCD display to guide an installer in the set-up of an electronic thermostat, and includes a flow chart (and accompanying



description) that shows natural language sentences being posed to the installer that allow the installer to enter one of multiple responses:

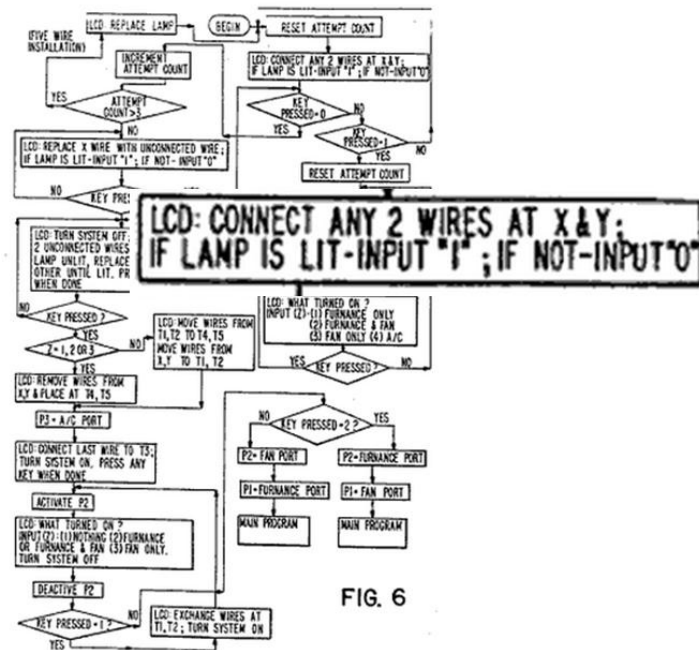
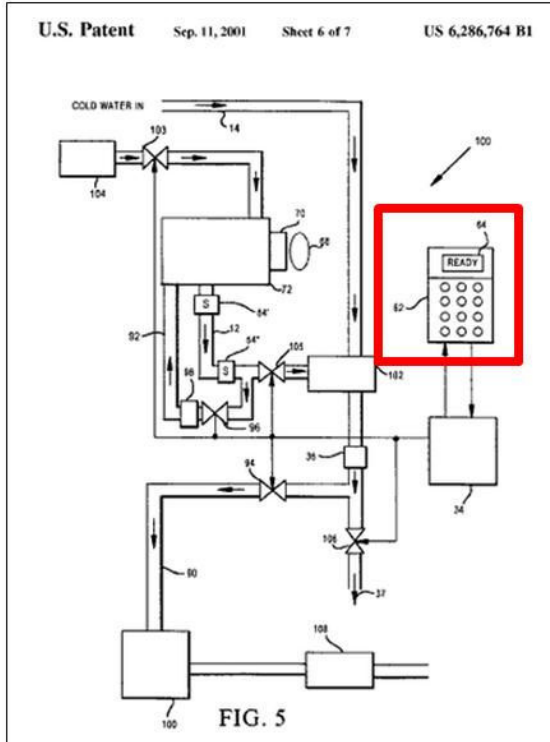


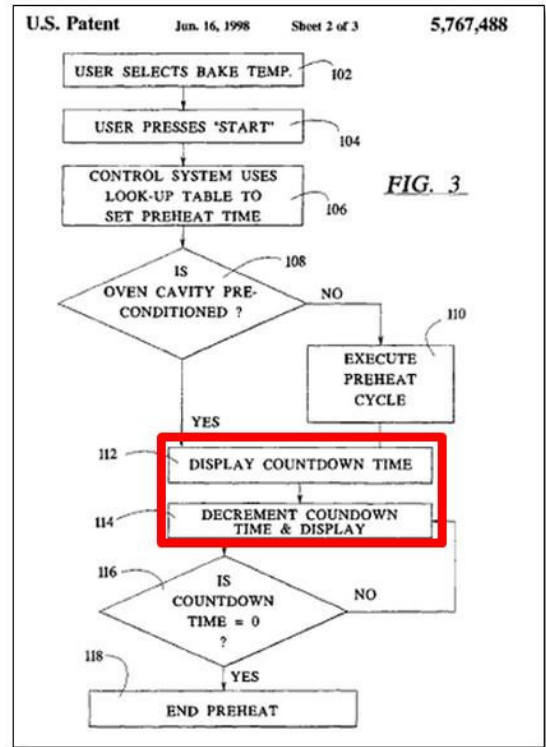
FIG. 6

The '813 prior art patent was not cited by Honeywell or by the Patent Office in Honeywell's '504 "natural language" patent.

175. The subject matter of the '948 patent, which is titled "Controller Interface with Dynamic Schedule Display," and described by Honeywell in the Amended Complaint as "interfaces that reflect the time anticipated for the system to reach a particular setpoint," was also old when Honeywell filed its patent application. Specifically, "time to temperature" had already been developed via controllers for temperatures of showers and "central heating and cooling system[s]" (U.S. Patent 6,286,764, filed July 4, 1999, available at <http://tinyurl.com/7jdet8w>) and for heating of an oven (U.S. Patent 5,767,488, filed August 5, 1996, available at <http://tinyurl.com/74eh7jm>), as shown in the figures from those prior art patents below:



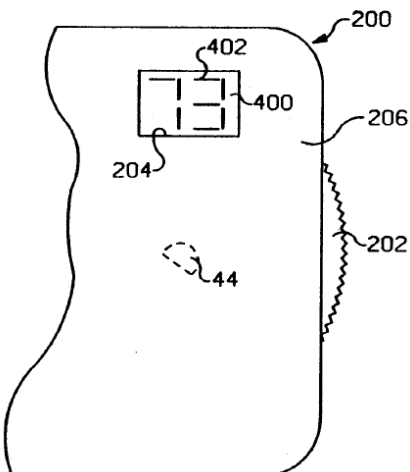
"Other system functions and parameters which are optionally presented by the user display 64 interfaced with the control unit 34 include running or static time displays corresponding to an estimated time period before a set temperature is reached." Column 15, lines 53-57.



Neither of these prior art patents was cited by Honeywell during prosecution of the '948 patent-in-suit, and the Patent Office did not cite them either.

176. Honeywell's '789 patent-in-suit, which claims a thermostat having a rotatable selector and a non-rotating element that at least partially overlaps a front face of the rotatable selector (*see* claim 22), is matched by U.S. Patent 5,224,649 which shows a temperature adjustment knob 202 that rotates on a shaft 44 and has its face partially overlapped with a non-rotating thermostat cover 206:

FIG. 7



<http://tinyurl.com/6rotaj7>. Neither Honeywell nor the Patent Office cited this patent during the prosecution of the '789 patent-in-suit. Furthermore, most of the claims of this patent require a potentiometer, which the Nest Learning Thermostat does not have.

177. Apart from their invalidity over the prior art, the Honeywell patents recite particular approaches that Nest Labs does not follow with its modern, computer-like thermostat, leading to the inescapable conclusion that Nest Labs does not infringe a single valid claim from any of the asserted patents. Honeywell's dubious patent selections, as well as similar frailties in the rest of Honeywell's complaint, betray Honeywell's true fears and true intentions—Honeywell seeks to use this legal action to remove a new and innovative competitor, on information and belief. Honeywell has a pattern of doing exactly this, especially in the thermostat area, on information and belief. Nest Labs will defend itself on the merits and will seek redress for Honeywell's anticompetitive actions.

### **FIRST COUNTERCLAIM**

#### **(Declaratory Judgment of Non-Infringement and Invalidity of the '504 Patent)**

178. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 177 as though fully set forth herein.

179. Honeywell has sued Nest Labs for patent infringement of the '504 patent. Nest Labs denies infringement and denies that the '504 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

180. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '504 patent.

181. The '504 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

182. As one example, at least claim 1 of the '504 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 5,065,813.

### **SECOND COUNTERCLAIM**

#### **(Declaratory Judgment of Non-Infringement and Invalidity of the '948 Patent)**

183. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 182 as though fully set forth herein.

184. Honeywell has sued Nest Labs for patent infringement of the '948 patent. Nest Labs denies infringement and denies that the '948 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

185. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '948 patent.

186. The '948 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

187. As one example, at least claim 1 of the '948 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 6,286,764 or U.S. Patent 5,767,488.

**THIRD COUNTERCLAIM**

**(Declaratory Judgment of Non-Infringement and Invalidity of the '958 Patent)**

188. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 187 as though fully set forth herein.

189. Honeywell has sued Nest Labs for patent infringement of the '958 patent. Nest Labs denies infringement and denies that the '958 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

190. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '958 patent.

191. The '958 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

192. As one example, at least claim 17 of the '958 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 4,657,179.

**FOURTH COUNTERCLAIM**

**(Declaratory Judgment of Non-Infringement and Invalidity of the '899 Patent)**

193. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 192 as though fully set forth herein.

194. Honeywell has sued Nest Labs for patent infringement of the '899 patent. Nest Labs denies infringement and denies that the '899 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

195. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '899 patent.

196. The '899 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

197. As one example, at least claim 1 of the '899 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on European Publication EP 1 605 079 A2.

#### **FIFTH COUNTERCLAIM**

##### **(Declaratory Judgment of Non-Infringement and Invalidity of the '789 Patent)**

198. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 197 as though fully set forth herein.

199. Honeywell has sued Nest Labs for patent infringement of the '789 patent. Nest Labs denies infringement and denies that the '789 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

200. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '789 patent.

201. The '789 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

202. As one example, at least claim 22 of the '789 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 5,224,649.

#### **SIXTH COUNTERCLAIM**

##### **(Declaratory Judgment of Non-Infringement and Invalidity of the '790 Patent)**

203. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 202 as though fully set forth herein.

204. Honeywell has sued Nest Labs for patent infringement of the '790 patent. Nest Labs denies infringement and denies that the '790 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

205. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '790 patent.

206. The '790 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

207. As one example, at least claim 22 of the '790 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 4,405, 080.

### **SEVENTH COUNTERCLAIM**

#### **(Declaratory Judgment of Non-Infringement and Invalidity of the '988 Patent)**

208. Nest Labs incorporates and realleges the allegations of paragraphs 132 to 207 as though fully set forth herein.

209. Honeywell has sued Nest Labs for patent infringement of the '988 patent. Nest Labs denies infringement and denies that the '988 patent is valid. There is therefore a substantial, immediate, and continuing actual controversy between Nest Labs and Honeywell.

210. Nest Labs has not infringed (either directly, contributorily, or by inducement) any valid claim of the '988 patent.

211. The '988 patent is invalid for failing to comply with the provisions of the Patent Laws, including one or more of 35 U.S.C. §§ 101, 102, 103, and 112.

212. As one example, at least claim 22 of the '988 patent is invalid under 35 U.S.C. §§ 102 or 103 based at least in part on U.S. Patent 5,736,795.

### **PRAYER FOR RELIEF**

Wherefore, Nest Labs prays for the following relief:

A. Dismissal of Honeywell's Amended Complaint with prejudice and that Honeywell be granted no relief;

B. A declaration that Nest Labs has not infringed any valid claim of the '504 patent, the '948 patent, the '958 patent, the '899 patent, the '789 patent, the '790 patent, and the '988 patent;

C. A declaration that the '504 patent, the '948 patent, the '958 patent, the '899 patent, the '789 patent, the '790 patent, and the '988 patent are invalid;

D. A declaration that this is an exceptional case under 35 U.S.C. § 285 and awarding Nest Labs its costs, expenses and attorneys' fees in this action;

E. Such other and further relief as the Court may deem appropriate.

**DEMAND FOR JURY TRIAL**

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Defendant and Counterclaimant Nest Labs requests a trial by jury of any and all issues so triable under the applicable laws.



Dated: April 12, 2012

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