## Appendix A-3

## Invalidity Claim Chart for U.S. Patent No. 8.131,497 ("the '497 patent")

## U.S. Patent Pub. No. 2005/0171645 ("Oswald")

The chart below discloses how prior art references identified by Respondent disclose, either expressly or inherently, and/or render obvious each of the asserted claims. The citations provided are exemplary and do not necessarily include each and every disclosure of the limitation in the references. Respondent has cited the most relevant portions of the identified prior art. Other portions of the identified prior art may additionally disclose, either expressly or inherently, and/or render obvious one or more limitations of the asserted claims. To provide context or aid in understanding the prior art and the state of the art at the time of the alleged invention, Respondent reserves the right to rely on: (1) uncited portions of the identified prior art; (2) other prior art not identified herein; (3) references that show the state of the art (irrespective of whether such references themselves qualify as prior art to the asserted patents); (4) factual testimony from the inventors or authors of the prior art references, or purveyors of prior art devices; and/or (5) expert testimony.

Citations to particular drawing or figure in the accompanying charts should be understood to include the description of the drawing or figure, as well as any text associated with the drawing or figure. Citations to particular text concerning a drawing or figure, should also be understood to encompasses that drawing or figure as well. The identified prior art expressly and/or inherently discloses the features of the asserted claims under all proposed constructions of the asserted claims. To establish the inherency of certain features of the prior art to invalidate the asserted claims, Respondent may rely on cited or uncited portions of the prior art, other documents, factual testimony, and expert testimony.

Discovery is still ongoing, and Respondent reserves its right to supplement its contentions with additional evidence as discovery continues.

Claims 1, 2, 4, and 5 of the '497 patent are anticipated and/or rendered obvious by Oswald alone or in combination with:

- (1) U.S. Patent No. 6,789,739 ("Rosen")
- (2) WO 02/37332 ("Ryan")
- (3) One or more of the references cited in this chart, in Appendices A-1 to A-9, and/or identified in Section V.B of Respondents' Invalidity Contentions.

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Oswald was filed on November 26, 2004, and published on August 4, 2005. Oswald is prior art under at least pre-AIA 35 U.S.C. § 102(a), (b), and (e).

Rosen was filed on November 4, 2002, and published on September 14, 2004. Rosen is prior art under at least pre-AIA 35 U.S.C. § 102(a), (b), and (e).

Ryan was published on May 10, 2002. Ryan is prior art under at least pre-AIA 35 U.S.C. § 102(a), and (b).

<u>'497 patent</u>	
<u>Claim 1</u>	
[1pre] A system for calculating a value for the operational efficiency of a heating, ventilation, and air conditioning (HVAC) system comprising:	To the extent that the preamble is limiting, Oswald discloses, expressly or inherently, "[a] system for calculating a value for the operational efficiency of a heating, ventilation, and air conditioning (HVAC) system under" any proposed construction:
	"A household energy management system uses measurements of the household electricity supply 4 to identify and to determine the energy consumption of individual household appliances. From these measurements, models can be built of the behaviour of the occupants of the house, the thermal properties of the house and the efficiency of the appliances. Using the models, the household appliances-in particular heating and cooling appliances-can be controlled to optimize energy efficiency; and maintenance programmes for the appliances and for the house itself can be recommended to the householder or arranged with a service company."
	Oswald, at Abstract.
	"The invention relates to the field of household energy management and in particular to ways in which the behaviour of the occupants of a house, the thermal properties of the house and the operation of household appliances can be measured and modelled, in order to control the household appliances in a certain way or to recommend courses of action to the users of the system such that energy use by the household is made more efficient."

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