#### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORPORATION AND DENSO CORPORATION

**Petitioners** 

v.

### INTELLECTUAL VENTURES II LLC

Patent Owner

Case No.: IPR2017-01497
Patent No. 7,067,952
Title: Stator Assembly Made from a Molded
Web of Core Segments and Motor Using Same

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 7,067,952

Intellectual Ventures Exhibit 2004



| I.   | PRE   | LIMIN   | IINARY STATEMENT                      |    |  |
|------|---|---|---------------------------------------|----|--|
| II.  | THE '952 PATENT   |   |                                       |    |  |
|      | A.  | The '952 Patent Specification   |                                       |    |  |
|      | B.  | The '952 Patent's Challenged Claims   |                                       |    |  |
|      | C.  | The '952 Patent Prosecution History   |                                       |    |  |
|      | D.  | Priority Date   |                                       |    |  |
| III. | II. LEVEL OF ORDINARY SKILL   |   |                                       |    |  |
| IV.  | CLAIM CONSTRUCTION  |   |                                       |    |  |
|      | A.  | "phase change material"1  |                                       |    |  |
|      | B.  | "a bridge between adjacent segments to link adjacent segments into a continuous strip"              |                                       |    |  |
|      | C.  | "the bridge is formed by interconnecting two mating sections formed from the phase change material" |                                       |    |  |
| V.   | CLAIMS 10-12 OF THE '952 PATENT ARE UNPATENTABLE OVER THE PRIOR ART |   |                                       |    |  |
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|      |   | 2.  | Ishihara (1999)                       | 20 |  |
|      |   | 3.  | Lieu (2001)                           | 20 |  |
|      |   | 4.  | Iikuma (1997)                         | 21 |  |
|      |   | 5.  | Stridsberg (1995)                     | 21 |  |
|      |   | 6.  | Sheeran (priority to 2002)            | 21 |  |



| C. | Ground 1: Claims 10-12 are invalid as obvious over Nakahara in view of Ishihara and/or Lieu             |  |  |    |  |
|----|---|--|--|----|--|
|    | 1.  | Claim 10: Obvious over Nakahara in view of Ishihara2         |  |    |  |
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|    |   | b.   | "a plurality of discrete stator segments each at least partially encased with a phase change material"   | 25 |  |
|    |   | c.   | "wherein the phase change material also comprises a bridge between adjacent segments to link adjacent segments into a continuous strip, wherein the bridge is formed by interconnecting two mating sections formed from the phase change material" | 26 |  |
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|----|-------|--|----|
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E.

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