Case 1:17-cv-00300-UNA Document 1-6 Filed 03/20/17 Page 1 of 20 PageID #: 142

EXHIBIT 6

U.S. Patent No. 7,067,944

Claim 3

Toyota / Aisin Large Pump Toyota P/N 161A0-29015 Aisin P/N WPT-190

Case 1:17-cv-00300-UNA Posupaent No. 7, jed 943/20/17 3Page 3 of 20 PageID #: 144



Case 1:17-cv-00300-UNA Document 1/6. 7,510,944.20/17, 3Page 4 of 20 PageID #: 145 "3. A motor comprising:"



Case 1:17-cv-00300-UNA Dosument 186 7, jed 23/20/17 3Page 5 of 20 PageID #: 146

"3. A motor comprising:"

Toyota Prius C Two 1.5L L4 – Electric/Gas

Toyota Prius C Three 1.5L L4 - Electric/Gas

Toyota Prius C One 1.5L L4 – Electric/Gas

Toyota Prius V Five 1.8L L4 - Electric/Gas

Toyota Prius V Two 1.8L L4 – Electric/Gas

Toyota Prius V Four 1.8L L4 – Electric/Gas

Toyota Prius V Three 1.8L L4 – Electric/Gas



http://o.aolcdn.com/dims-

global/dims3/GLOB/resize/708x398/quality/60/http://o.aolcdn.com/commerce/autodata/images/USC60TOC161D022000.jpg

See also http://parts.olathetoyota.com/oe-toyota/161a039025 (accessed December 12, 2016).

The Aisin Pump is made in Japan:

Case 1:17-cv-00300-UNA Dosument No. 7, jec/943/20/17 3Page 6 of 20 PageID #: 147



Case 1:17-cv-00300-UNA Dosument 18. 7Filed 93/20/17 3Page 7 of 20 PageID #: 148



Case 1:17-cv-00300-UNA Dosument 18. 7, 16, 943/20/17 3Page 8 of 20 PageID #: 149

"3. A motor comprising:"

As shown in greater below with respect to the other limitations of claim 1, the Aisin Pump is an electric motor having a stator and a rotor, where the stator is designed to cause the rotor to rotate during operation.



Case 1:17-cv-00300-UNA Dosument No. 7, jed 943/20/17 3Page 9 of 20 PageID #: 150



Case 1:17-cv-00300-UNA Document 1.6. Filed 94/20/17m Page 10 of 20 PageID #: 151

"a) a core having poles and windings around said poles forming a pole assembly;"

a) a core having poles and windings around said poles forming a pole assembly; The Pump comprises a core having poles and windings around said poles forming a pole assembly.

For example, as shown in the photo below, the motor of the Pump has a plurality of poles that are formed by laminations and arranged together in a circular shape to form a core. Each pole is wrapped with copper wire windings.



Case 1:17-cv-00300-UNA Documenting. Filed, 93420417m Bage 11 of 20 PageID #: 152

Thermoplastic Body Core Copper Copper Wire Wire Windings Windings Pole IMG_1884.JPG

"a) a core having poles and windings around said poles forming a pole assembly;"

"a) a core having poles and windings around said poles forming a pole assembly;"

For example, the Pump's poles and windings around said poles form a pole assembly:



Case 1:17-cv-00300-UNA Dogunant 1_{N_0} Filed 9420 and 3_{M_0} Bage 13 of 20 PageID #: 154

"b) a shaft, the shaft and pole assembly not being in direct contact with one another, but rather the shaft being spaced from the pole assembly; and"

b) a shaft, the shaft and pole assembly not being in direct contact with one another, but rather the shaft being spaced from the pole assembly; and The Pump comprises a shaft, the shaft and pole assembly not being in direct contact with one another, but rather the shaft being spaced from the pole assembly.

For example, as shown in the picture below, the motor of the Pump contains a shaft:



IMG_1783.JPG

Case 1:17-cv-00300-UNA Dogunant 1 No. Filed, 93420/17m Page 14 of 20 PageID #: 155

"b) a shaft, the shaft and pole assembly not being in direct contact with one another, but rather the shaft being spaced from the pole assembly; and"

The shaft does not directly contact the core or the windings of the pole assembly. The shaft is positioned within and spaced from the pole assembly:



Case 1:17-cv-00300-UNA Document 1.6. Filed, 93/20117m Bage 15 of 20 PageID #: 156

"c) a thermoplastic material secured to the shaft and substantially encapsulating the pole assembly,"

c) a thermoplastic material	The Pump comprises a thermoplastic material secured to the shaft and substantially encapsulating the pole assembly.
secured to the shaft and substantially encapsulating the pole assembly	For example, the motor of the Pump includes a thermoplastic body that is formed from a material identified on the Pump as "PPS + $I - GF$ 30" as shown below:



Case 1:17-cv-00300-UNA Document 1.6. Filed, 92420/17 Page 16 of 20 PageID #: 157 "c) a thermoplastic material secured to the shaft and substantially encapsulating the pole assembly,"



IMG_1705.JPG

Upon information and belief, the label "PPS + I - GF 30" refers to a blend of polyphenylene sulfide and an imide compound with 30% glass fiber filler, with a greater proportion of polyphenylene sulfide than of the imide compound as indicated by the order "PPS + I" rather than "I + PPS." Upon information and belief, imide compounds may be thermoplastic or thermoset compounds and polyphenylene sulfide is a thermoplastic compound.

The portion of the body composed of polyphenylene sulfide with 30% glass fiber filler, often identified with the label "PPS – GF 30" is a known thermoplastic. *See, e.g.*, U.S. Patent Publication 2009/0173903 (application No. 12/295,565), at ¶ 0114 ("The abbreviations of the resin names in the tables above are as follows. PPS-GF30: Polyphenylene sulfide resin containing 30 wt % of glass fibers").

Case 1:17-cv-00300-UNA Document 1.6. Filed 03/20/17 Page 17 of 20 PageID #: 158

"c) a thermoplastic material secured to the shaft and substantially encapsulating the pole assembly,"



Case 1:17-cv-00300-UNA Document 1.6. Filed, 92/20/17m Page 18 of 20 PageID #: 159 "c) a thermoplastic material secured to the shaft and substantially encapsulating the pole assembly,"



Case 1:17-cv-00300-UNA Dogunant 186. Filed 94/20/17 Page 19 of 20 PageID #: 160

"c) the thermoplastic material joining the pole assembly to the shaft in the space between the pole assembly and the shaft, filling in the space between them such that the windings, core and shaft are rigidly fixed together."

c) the thermoplastic material joining the pole assembly to the shaft in the space between the pole assembly and the shaft, filling in the space between them such that the windings, core and shaft are rigidly fixed together. The pump comprises thermoplastic material joining the pole assembly to the shaft in the space between the pole assembly and the shaft, filling in the space between them such that the windings, core and shaft are rigidly fixed together.

For example, thermoplastic material encapsulates and rigidly fixes the shaft into the same body of material that encapsulates the copper wire, as shown in the picture below:



Case 1:17-cv-00300-UNA Document 1.6. Filed 93/20/17m Page 20 of 20 PageID #: 161

"c) the thermoplastic material joining the pole assembly to the shaft in the space between the pole assembly and the shaft, filling in the space between them such that the windings, core and shaft are rigidly fixed together."

The picture directly below shows the Pump from the reverse side, with the shaft extending outward to receive the rotor:



IMG_1783.JPG

The thermoplastic body substantially encapsulates the pole assembly and also contains a portion that surrounds and secures to the shaft. The pole assembly and shaft are separated by a visible distance that is filled with the thermoplastic material, as shown above. The thermoplastic material rigidly fixes the core, copper wire and shaft together.