(57) Abstract: A prosthetic system (100) may use a decoder to predict an intended action, such as a reach, from processed signals generated from measured neural activity. The decoder may include a cognitive state machine, which transitions between cognitive states based on transition rules.
Published: with international search report

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
   IPC(7) : A61F 2/70; 2/48
   US CL : 623/25, 24
   According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
   Minimum documentation searched (classification system followed by classification symbols)
   U.S. : 623/25, 24, 57 63; 414/2; 600/546

   Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

   Electronic database consulted during the international search (name of data base and, where practicable, search terms used)
   East West Search, West

C. DOCUMENTS CONSIDERED TO BE RELEVANT
<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>US 5,314,495 A (KOVAICS) 24 May 1994 (24.05.1994), see entire document.</td>
<td>1-50</td>
</tr>
<tr>
<td>X</td>
<td>US 4,314,379 A (TANIE et al) 09 February 1982 (09.02.1982), see entire document.</td>
<td>1-50</td>
</tr>
<tr>
<td>A,P</td>
<td>US 6,344,062 B1 (ABBODHI et al) 05 February 2002 (05.02.2002), see entire document.</td>
<td>1-50</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C.
☐ See patent family annex.

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Date of the actual completion of the international search
05 September 2002 (05.09.2002)

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