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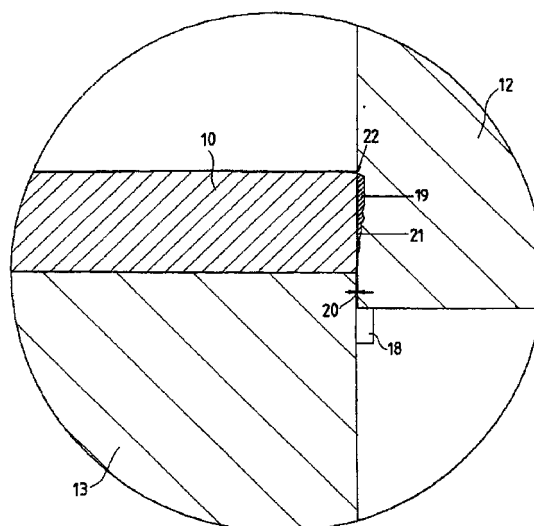
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(54) **Process for cutting metallic pieces with a high degree of finishing**

(57) A process for cutting metallic pieces with a high degree of precision and surface finishing from a continuous material or cut-down sizes inserted into a die between a matrix (12) and a punch (13) interacting between each other, comprising:

- a first cutting phase in which a piece (10) is separated from a scrap or other piece (11) opposite a surface having a mixed profile;
- a second cutting phase of said piece (10) opposite said surface having a mixed profile (15, 16, 17), so as to achieve a smooth finished surface (21).

**Fig.1a**



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# EUROPEAN SEARCH REPORT

Application Number  
EP 98 20 0758

| DOCUMENTS CONSIDERED TO BE RELEVANT   |  |   |  |
|---|--|---|--|
| Category  | Citation of document with indication, where appropriate, of relevant passages                                | Relevant to claim                                 | CLASSIFICATION OF THE APPLICATION (Int.CI.6) |
| X   | FLIMM, JOSEPH: "Spanlose Formgebung"<br>1984, CARL HANSER, MUNICH, VIENNA<br>XP002163342<br>* page 286-287 * | 1-8,<br>10-12                                     | B21D28/16                                    |
| Y   | * page 292-293 *   | 9   |  |
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| X   | JP 07 178475 A (YUTAKA GIKEN CO LTD)<br>18 July 1995 (1995-07-18)<br>* abstract; figure 7 *                  | 1   |  |
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|   |  |   | TECHNICAL FIELDS SEARCHED (Int.CI.6)         |
|   |  |   | B21D   |
| The present search report has been drawn up for all claims  |  |   |  |
| Place of search<br>MUNICH   |  | Date of completion of the search<br>21 March 2001 | Examiner<br>Ash, R                           |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |  |   |  |

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21-03-2001

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