

ABSTRACT

People used to analyze wood quality using human senses. This method requires high skill and experience. Thus this method is subjective and low in accuracy.

Rapid advancement of science now has getting through every sector. One of its implementation is in pattern identification field. By recording all known wood pattern, system could compare sample and identify which pattern it is resembled.

System could identify wood pattern using Artificial Neural System (ANS). This system use texture as image information to predict objective condition from surface characteristic. Characteristic extraction method is chosen to identify wood texture. Later, the texture information will be compared by ANS to identify sample wood pattern.

With this method, system can gain wood pore characteristic to identify wood quality by identifying patterns that go through characteristic extraction. This system may got to level of accuraction 99.8%.

Keyword: pattern identification, artificial neural system, texture, characteristic extraction.