

Title (en)

FERRITE MATERIAL WITH LOW HYPERFREQUENCY LOSSES AND PRODUCTION METHOD

Title (de)

FERRITMATERIAL MIT GERINGEN HYPERFREQUENZVERLUSTEN UND HERSTELLUNGSVERFAHREN

Title (fr)

MATERIAU FERRITE A FAIBLES PERTES EN HYPERFREQUENCE ET PROCEDE DE FABRICATION

Publication

EP 1829061 A1 20070905 (FR)

Application

EP 05821798 A 20051216

Priority

- EP 2005056844 W 20051216
- FR 0413582 A 20041220

Abstract (en)

[origin: WO2006067088A1] The invention relates to a ferrite material with a garnet structure based on yttrium and iron and comprising copper enabling the sintering time thereof to be reduced substantially in comparison with conventional ferrite garnet-type materials, corresponding to the following chemical formula: $Y_{a'}TR_{b'}Fe_{c'}Al_{d'}In_{e'}Ca_{f'}Cu_{g'}Zr_{h'}V_{i'}Co_{j'}Si_{k'}O_{12 \pm y}$ wherein TR = a rare earth or combination of rare earths and $3(a+b+c+d+e) + 2(f+g+j) + 4(h+k) + 5i = 24 \pm 2y$ $1=a=3,5$; $0=b=1,5$; $4=c=5$; $0=d=1,5$; $0=e<0,8$; $0=f=1$; $0=g=0,05$; $0=i<0,8$; $0=j=0,5$; $0=k=0,5$. Applications: hyperfrequency components, passive inductive low-loss components operating at Gigahertz frequencies.

IPC 8 full level

C04B 35/26 (2006.01); **H01F 1/34** (2006.01)

CPC (source: EP US)

C04B 35/2675 (2013.01 - EP US); **C04B 35/6261** (2013.01 - EP US); **C04B 35/6262** (2013.01 - EP US); **H01F 1/346** (2013.01 - EP US); **C04B 2235/3208** (2013.01 - EP US); **C04B 2235/3217** (2013.01 - EP US); **C04B 2235/3224** (2013.01 - EP US); **C04B 2235/3225** (2013.01 - EP US); **C04B 2235/3239** (2013.01 - EP US); **C04B 2235/3244** (2013.01 - EP US); **C04B 2235/3275** (2013.01 - EP US); **C04B 2235/3281** (2013.01 - EP US); **C04B 2235/3286** (2013.01 - EP US); **C04B 2235/3287** (2013.01 - EP US); **C04B 2235/3418** (2013.01 - EP US); **C04B 2235/656** (2013.01 - EP US); **C04B 2235/762** (2013.01 - EP US); **C04B 2235/764** (2013.01 - EP US); **C04B 2235/77** (2013.01 - EP US); **H01F 1/36** (2013.01 - EP US)

Citation (search report)

See references of WO 2006067088A1

Cited by

EP3838865A1; FR3105217A1; EP4177233A1; FR3128955A1

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